# Change Log for LTPDA Toolbox v2.4

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### Introduction

This version of LTPDA is 2.4. This document lists the changes since V2.3.1.

### This version requires MATLAB 2010a or above.

The main focus of this release has been on code optimisation to improve execution speed and to aid in maintainability. There have also been some fairly major changes to the toolbox, so keep reading to find out what they are! In addition, a significant number of bugs and change requests have been addressed.

# New features and major changes

#### **Extension modules**

LTPDA now supports 3rd party extension modules. See the LTPDA user manual for details how to build and install extension modules.

Note: this is now the supported way to add your own-built in models to LTPDA. The old scheme of adding directories in the LTPDA preferences is no longer supported and has been removed. Users with their own built-in models should build an extension module and move the models in to the extension module. The user manual explains where to put them.

### Saving and loading AOs

- 1. ao/save If the user doesn't specify the filename then save saves the object(s) as a MAT file in the current folder using the variable name as a filename
- 2. The AO constructor for loading data from ASCII files now makes fewer assumptions about the content of the file. Instead the user is expected to pass more information in the

plist. The only assumption we make is that the data files contains at least one column of data. As such, the call

```
a = ao('mydata.txt')
```

will result in a cdata AO containing the all columns of data in the file stored as a matrix.

3. When constructing AOs from files, all file extensions other than 'xml' and 'mat' are treated as if they contain ASCII data.

### **Preferences**

LTPDA preferences has new panel for configuring the default look of plots

### **Logical AOs**

AOs now accept logical values for construction and we have some new logical logical operators (see below).

### **Plotting AOs**

ao/iplot now has a new plist key for overriding the default legend font size 'LegendFontSize'.
You can also include object descriptions in the legend by setting the corresponding preference is set in LTPDAprefs.

ao/iplot: The use of the 'xmaths', 'ymaths', and 'zmaths' parameters is now deprecated and will be removed in a future release.

### **Error propagation**

More AO methods now propagate errors: ao/scale, ao/power, ao/mtimes, ao/mrdivide.

#### matrix constructors

We have some new constructors for the matrix class:

```
matrix(plist('values', ..., 'names', ..., 'yunits', ...))
matrix(doubleArray)
matrix(doubleArray, cellArray)
```

#### **New class methods**

- 1. smodel/hessian computes the hessian matrix for smodels
- 2. ao/intersect forms the intersection of two AOs
- 3. new logical binary operators for AO class: ao/and, ao/or
- 4. **ao/bicohere** computes the bicoherence of two input time-series. The result is a complex frequency-frequency-complex coherence map.

- 5. **ao/average** is a method to average AOs point-by-point. For each point, an average is taken over all the input objects.
- 6. New AO factory constructors:
  - 1. ao. randn (nsecs, fs) produces a time-series of random numbers
  - 2. ao. randn (nsamples) produces a cdata AO of random numbers
  - 3. ao.sinewave(nsecs, fs, f0, phi) produces a time-series of a sine-wave
  - 4. [01, 02, ...] = ao.load(filename) load multiple objects from a file. You need to know how many objects are in the file so that you can specify the correct number of output objects.
- 7. ltpda\_uoh/requirements lists the required extensions for rebuilding an object.
- 8. ao/zunits returns the zunits of an xzydata AO
- 9. ao/setZunits sets the units of the z-data for an xyzdata AO
- 10. We added a new AO constructor from a parameter contained in a plist. Suppose we have a plist containing a key 'a', then we can make a cdata AO with the value of 'a'. Other properties are also used in constructing the AO (at the moment only properties 'unit' and 'units' are supported). All properties are added to the procinfo.

```
e.g. a = ao(plist('parameter', pl, 'key', 'a'))
```

### **Methods removed**

Some LTP-specific methods have been removed and moved in to extension modules.

The following were all moved to the LPF\_DA\_Module extension module:

- 1. ao/ltp\_ifo2ac
- 2. ao/smallvec\_coef
- 3. ao/smallvector\_lincom
- 4. ao/smallvectorfit
- 5. ao/mdc1\_ifo2acc\_inloop
- 6. ao/mdc1\_ifo2cont\_utn
- 7. ao/mdc1\_cont2act\_utn
- 8. ao/mdc1\_ifo2control
- 9. ao/mdc1\_ifo2acc\_fd\_utn
- 10. ao/mdc1\_x2acc
- 11. ao/mdc1\_ifo2acc\_fd
- 12. pest/LTPimperf2physParams

The AO constructors 'from GEO Server' and 'from NDS Server' have been removed and replaced by built-in models in the GEO LTPDA Extension module.

Other methods removed which were deprecated in previous releases:

- 1. ao/pwelch use ao/psd instead
- 2. ao/curvefit use ao/xfit or ao/tdfit instead
- 3. ao/straightLineFit use ao/linfit instead
- 4. ao/timedomainfit use ao/lscov instead
- 5. pest/toA0 use pest/find instead
- 6. ao/ltpda\_fitChiSquare
- 7. ao/hist\_gauss use ao/hist instead

### **Multiplying matrices of AOs**

Given two matrices of AOs, the inner multiplication operator has changed from a matrix multiplication to an element multiplication.

```
M1 = [a1 \ a2; \ a3 \ a4]; \% \ a\# \ is \ an \ A0
M2 = [b1 \ b2; \ b3 \ b4]; \% \ b# \ is an AO
M = M1*M2
then M(1) = a1.*b1 + a2.*b3
```

## **Method outputs**

The output of some methods are now matrix objects and no longer vectors of AOs to make rebuilding work:

- ssm/simulate

- 2. ssm/CPSD 3. ssm/PSD 4. ssm/bode 5. ssm/kalman 6. ssm/resp

To retrieve the AOs from inside the matrix object in a 'history safe' way, use matrix/ getObjectAtIndex.

matrix/det no longer returns a matrix object, but instead an object of the same class as the inner objects.

ao/rotate no longer supports the multiple output function call.

### Changes to evaluating smodel and pest object

The smodel/double method has been harmonized with MATLAB double: the values for the independent variables x must now be vectors of double, and they must be set before the call to the method, that now has no parameters.

The smodel/eval method has been changed to build the output AO based on these parameters: 'output type' to choose the output data type 'output x', to choose the X values for the output data AO. In case of a double vector, the result is a cdata AO. In case of an ao, the output is a copy of this object but the 'y' field is calculated from the model.

As a consequence, the pest/eval method has been modified. If the user inputs the independent variable values XDATA within AOs, their 'y' field will be used if not otherwise specified. This is different from previous versions of the toolbox. Furthermore, if the user inputs the independent data XDATA within AOs, the output data type will be of the same type.

### smodel class has new properties

The properties aliasNames and aliasValues can be used to define variable aliases which are then used in the model expression.

### **Built-in model format**

The format of built-in models was completely written to allow a more flexible versioning of models. You can build new-style built-in models using the utility utils.models.makeBuiltInModel(). See the documentation for more details.

### ssm class user-interface

The user interface of some ssm class methods was simplified and changed. As such, some old usages may no longer work. Please consult the relevant method help if you encounter any problems.

### **Detrending**

Default detrending order in ao/det rend was changed from 0 to 1 to match the corresponding MATLAB detrend behaviour.

# **Other Minor Changes of Note**

- 1. The verbose level for many output messages was increased to make LTPDA a bit quieter.
- 2. User objects now have an empty default name.
- 3. ao/search now properly tracks history
- 4. constructing AOs from data files ('from ASCII' constructor) works with arbitrary delimiters now. The delimiter can be set in the plist.
- 5. ao/fft and ao/ifft support a scaling option ('scale' plist key) which scales the output by the sampling rate if the AO is a time-series.
- 6. ssm class speed improvements for bode and simulate
- 7. ao/select now returns an AO with the x-field filled, even if the result is evenly sampled. The idea here is that selecting samples from a vector (especially a time-series) is not well defined in terms of the resulting sample rate. So we leave the x data alone and let the user decide what to do next.

### **MANTIS Issues Resolved**

0000529	Bug Report	LTPDAPrefs GUI not reading the .dot file location
0000528	Bug Report	Rebuilt library does not become live until the workbench is restarted
0000527	Bug Report	inconsistency in AO cdata/xydata class for handling logicals.
0000525	Bug Report	Error message: ??? Operands to the    and && operators must be convertible to logical scalar values. Error in ==> param.getVal
0000518	Bug Report	pzmodel help/documentation
0000516	Bug Report	Problem with default preferences being written on first use
0000515	Bug Report	ao/transpose not working for cdata aos
0000513	Bug Report	ao/join with data not in sequence
0000512	Change Request	FFT/IFFT unit conventions and scaling

0000508	Change Request	Make the parameter overview table editable.
0000507	Change Request	Filter by key the parameter overview table
0000506	Bug Report	Length of the pipeline name is not updated upon pipeline renaming
0000503	Change Request	Don't limit the loading of ASCII files to .txt and .dat
0000502	Bug Report	Loading single column ascii files
<u>0000501</u>	Bug Report	Arithmetic operations on frequency-series
0000498	Bug Report	LTPDAworkbench/reset has a bug in V2.3
0000497	Bug Report	Remove all mention of non-user classes from the user manual
0000496	Bug Report	Specifying multiple values for 'Xunits' key of ao/iplot
0000495	Bug Report	Itpda_filter/impresp has fixed sample rate.
0000488	Bug Report	Problem with Itpda_startup and LTPDARepositoryManager
0000487	Bug Report	Java error choosing repository
0000486	Bug Report	Original wb filename is stored inside pipelines
0000485	Bug Report	Resize the library tree when gui is maximized
0000481	Bug Report	ao/submit fails to create meta data.
0000480	Bug Report	The Web interface on objmeta table shows: validation, validation date and author, the datail page shows only 2
0000478	Bug Report	Retrieving objects from database, when not specifying completely hostaname, database, username
0000476	Bug Report	Cannot change the size of the pipeline window
0000474	Bug Report	ssm/kalman: parameter 'select' is of wrong type.
0000473	Bug Report	ssm/simulate: field AOS default value lacks a left square bracket.
0000470	Change Request	The databases 'tsdata' table should also store the timezone of the 't0'
0000465	Bug Report	Keyboard shortcut CTRL+O does not work.
0000460	Bug Report	no plot is available with frequency series with 1 point size
0000459	Bug Report	no plot is available with time series with 1 point size.
0000458	Bug Report	Web repository interface generate wrong iplot.
0000458	Bug Report	Web repository interface generate wrong plot
0000457	Bug Report	ao.table doesn't show third column with xyz data.
0000447	Bug Report	Itpdareporobot error
0000444	Bug Report	Submitting 1 object with proc5 verbose i get submitting 2 objects to repository.
0000443	Bug Report	After deleting a object the submit button is still enable

	1	
0000442	Bug Report	Interpolation methods 4 resample and downsample.
0000438	Bug Report	Error changing model during execution
0000437	Bug Report	Annoying parameter editing issue
0000434	Bug Report	Annoying zoom problem
0000433	Bug Report	mysql-connector-java-5.1.6-bin.jar is installed in two copies.
0000427	Bug Report	Up arrow and down buttons don't work in execution plan form
0000426	Bug Report	Hitting cancel in the execution Plan panel the modified parameters are stored
0000424	Bug Report	NullPointerException using PEST constructor.
0000421	Bug Report	delay prameter missing in pzmodel plist and is present in mfir from pzmodel
0000420	Bug Report	AO built-in FreeDyn_1: suspicius error message.
0000417	Bug Report	Pole/Zero model editor: problem reading the value of a modified gain.
0000416	Bug Report	Issues reading LISO files.
0000412	Bug Report	Web documentation: downsample, etc.
0000411	Bug Report	SSM: some built-in models generate errors.
0000409	Bug Report	Pzmodel from parfrac conversion problem.
0000403	Bug Report	Plot of different xunits.
0000401	Bug Report	Some Ghost subsystem when iconize all command
0000390	Bug Report	Warning should be given if plist contains parameters that are not applicable.
0000389	Bug Report	Java error when opening the Char prefs of the annotation into the LTPDAWorkbench preferences
0000387	Bug Report	The relational operators do not mention the "exceptions" parameters in their help
0000381	Bug Report	miir.resp and filterbank.resp have different plists.
0000375	Bug Report	Error using the "include in legend" checkbox.
0000370	Bug Report	Setting plotinfo marker stops execution and throws exception
0000360	Change Request	saving the submit info into a file
0000355	Change Request	We have two positions in the cvs where we store the jar files -> remove one.
0000354	Bug Report	Two different plots swapping inputs (sum function on x axis).
0000349	Bug Report	Wrong pipe creation when trying to create a pipeline from an input port and an object
0000339	Bug Report	Problem with subsystem execution
0000333	Bug Report	Wrong error message when constructing a miir with fc [0.1 0.6] and fs 1.
0000327	Bug Report	Parfrac constructor ignores a parameter and does not show errors/warnings
0000301	Bug Report	We should not store the password of a connection that was refused because of wrong credentials

0000280	Bug Report	Documentation: some classes do not provide examples or information.
0000277	Bug Report	WEB INTERFACE: graph shows wrong x-axis
0000258	Change Request	Provide a way to load submission info fields from a simple text file.
0000245	Bug Report	iplot labels/legends with real and complex objects
0000244	Bug Report	Problem handling PORT choice
0000220	Bug Report	the operation remove output to MUX block or input to Demux Block are undoable
0000201	Change Request	The class filterbank needs a response method.
0000133	Bug Report	Coefficients reported by ao/detrend are wrong
0000053	Change Request	change zDomainFit so that it returns the best paramters and not the last iteration.
0000027	Change Request	Units conversion to SI method.

2011-05-11 17:08 ingo

```
Complete CVS Changes
2011-05-12 10:08 hewitson
       * tests/:
         plotting/aoplotter/@test_aoplotter_aoplotter/test_aoplotter_aoplotter.m,
plotting/aoplotter/@test_aoplotter_aoplotter/test_data.m,
plotting/plotter/@test_plotter_plotter/test_data.m,
plotting/plotter/@test_plotter_plotter/test_blotter.m,
          plotting/plotter/@test_plotter_plotter/test_plotter_m,
          stattest/@test_stattest_stattest/test_copy.m, stattest/@test_stattest_stattest/test_save_load.m,
          plotting/aoplotter/@test_aoplotter_singlePlots/test_aoplotter_singlePlots.m,
          stattest/@test_stattest_stattest/test_stattest.m: Remove
          these from the CVS since we don't want the stattest object and
          the plotter stuff was just a prototype.
2011-05-12 10:06 hewitson
       * @ao/setZunits.m: Add setter for the zunits.
2011-05-12 09:46 mauro
       * @ao/xfit.m: Help updated to reflect the new behavior of pest/eval
2011-05-12 08:52 hewitson
       * @ao/bicohere.m: Bug fix: the starting matrix size was wrongly
          computed.
2011-05-12 06:35 mauro
       * @ao/xfit.m: Fixed syntax errors in the help
2011-05-12 05:37 mauro
       * @ao/polyfit.m: Help updated to reflect the new behavior of
          pest/eval
2011-05-11 17:12 ingo
       * tests/database/@ltpda_objmeta_table/test_objmeta_version.m: Add
          some more information in the error case.
```

\* tests/database/@ltpda\_objmeta\_table/ltpda\_objmeta\_table.m: Small change to meta data information.

#### 2011-05-11 10:47 mauro

\* @ao/linfit.m: Fixed the example to comply with the new behavior of pest/eval

#### 2011-05-11 10:45 mauro

\* @pest/eval.m: Changed to: +) if XDATA are aos, guess the output data type form the input data type +) if XDATA are aos, always use the 'y' field if not otherwise specified. This is different from the previous behavior +) use utils.helper.setoutputs

### 2011-05-11 10:42 mauro

\* @ao/dsmean.m: Use utils.helper.setoutputs to set outputs Cosmetic changes

#### 2011-05-11 09:52 mauro

\* @smodel/eval.m: Supporting 'output type' to be empty. In this case we go for a cdata.

#### 2011-05-11 09:24 mauro

\* @ao/polyfit.m: Use utils.helper.setoutputs to set outputs

#### 2011-05-11 07:23 mauro

\* @smodel/mrdivide.m: Use callerIsMethod Help updated Use smodel.mergeFields

#### 2011-05-10 23:00 mauro

\* @smodel/mtimes.m: Use callerIsMethod Help updated Use smodel.mergeFields in the 1D case

#### 2011-05-10 22:43 mauro

\* @smodel/elementOp.m: Use the new method smodel.mergeFields

#### 2011-05-10 22:40 mauro

\* @smodel/: mergeFields.m, smodel.m: Added a static, hidden method that takes care of the field checking, merging etc

### 2011-05-10 22:36 mauro

\* @smodel/: rdivide.m, times.m: Use utils.helper.setoutputs to set outputs

#### 2011-05-10 22:35 mauro

\* @smodel/: minus.m, plus.m: Help updated

#### 2011-05-10 22:28 mauro

\* @smodel/: minus.m, plus.m: Use utils.helper.setoutputs to set outputs

#### 2011-05-10 18:51 mauro

\* @ao/select.m: The behavior is now: we never collapseX on tsdata if we select samples. The user is expecting to have 'peculiar' data after selecting samples with a list. Use utils.helper.setoutputs to set outputs Cosmetic changes

### 2011-05-10 18:47 mauro

\* @tsdata/collapseX.m: Cosmetic change to variable name

#### 2011-05-10 18:46 mauro

\* @ao/bin\_data.m: Use utils.helper.setoutputs to set outputs Use
plist/applyDefaults

#### 2011-05-10 16:10 mauro

\* @smodel/elementOp.m: It is not very smart to assign the yunits of a smodel to a pure number.

#### 2011-05-10 13:07 luigi

\* @smodel/assignalias.m: handle correctly trans and xvars

#### 2011-05-10 00:14 mauro

\* @ltpda\_uoh/setDescription.m: Support case 2. of the help Use utils.helper.setoutputs to set outputs Use plist/applyDefaults

#### 2011-05-10 00:11 mauro

\* @ao/simplifyYunits.m: Use utils.helper.setoutputs to set outputs
Use plist/applyDefaults

#### 2011-05-10 00:08 mauro

\* @ao/setYunits.m: Support case 2. of the help

#### 2011-05-09 23:57 mauro

\* @smodel/elementOp.m: Handling better (I hope) the case of combination with a number or a cdata ao

#### 2011-05-09 23:56 mauro

\* @smodel/display.m: Updated to comply with the trans that now are only strings

#### 2011-05-09 23:42 mauro

\* @smodel/elementOp.m: Rewritten to allow merging of: parameters, values, xvar, xvals, aliases New rules: 1) if one of the two values is empty, take the other 2) if the values do not coincide, throw an error To be finished with trans support

### 2011-05-09 21:52 ingo

\* @pest/eval.m: Remove the 'internal' flag because smodel/eval doesn't support this flag.

#### 2011-05-09 21:51 ingo

\* @LTPDAworkbench/parseBlocks.m: Use the 'block name' for the object name for the cases that: — the object name is 'None' — the object name is empty (this is new)

### 2011-05-09 13:01 mauro

\* @smodel/setParams.m: If setting a parameter with an empty value, inside a smodel where parameters exist and have values, make sure we insert a [] rather than doing nothing. This should ensure that the params/values are either N<->0 or N<->N

#### 2011-05-07 08:56 mauro

\* @ao/ao.m: Udpated to adapt to the new behavior of smodel/eval Use the callerIsMethod flag UTP updated accordingly

### 2011-05-07 08:55 mauro

\* @ao/fromSModel.m: Udpated to adapt to the new behavior of

smodel/eval

2011-05-07 07:16 mauro

\* @smodel/eval.m: Removed the property setting workaround

2011-05-07 07:15 mauro

\* @ao/: fromVals.m, fromXYVals.m: Restored the 'setProperties' step. We'll find an optimization later on.

2011-05-06 23:07 mauro

\* @ao/timeaverage.m: Use the ao/setXY method.

2011-05-06 08:44 mauro

\* @ao/bin\_data.m: Use the ao/setXY method.

2011-05-05 23:02 mauro

\* @smodel/eval.m: A major rewrite. Now the output AO is built from the smodel. based on these parameters: 'output type' to choose the output data type 'output xunits' to choose the X units for the output ao 'output x', to choose the X values for the output data ao. In case of a double vector, the result is a cdata AO. In case of an ao, the output is a copy of this object BUT the ''y' field is calculated from the model.

2011-05-05 22:56 mauro

\* @ao/ao.m: Introduced the callerIsMethod flag for the ao/fromXYVals calls

2011-05-05 22:54 mauro

\* @ao/fromXYVals.m: Introduced the callerIsMethod flag Removed unused parameter 'N'

2011-05-05 22:52 mauro

\* @ao/fromVals.m: Do not deal with info if the caller is a method

2011-05-05 22:50 mauro

\* @smodel/setXunits.m: Try a more sensible name

2011-05-05 22:50 mauro

\* @ao/: setX.m, setY.m: Introduced a check about the size of the x and y fields Use utils.helper.setoutputs for the outputs

2011-05-05 17:21 ingo

\* @ao/tdfit.m: bug fix: Please don't use the tilde '~' for an output of a function if you don't need the variable. This doesn't work for older MATLAB versions!

2011-05-05 16:18 miguel

\* +utils/@math/mhsample.m: removed the 'set' key from plist. Added the 'numeric output' to true so that the output of bode is 4 objs. mcmc works again with ssm objs.

2011-05-05 16:18 ingo

\* tests/database/@ltpda\_objmeta\_table/test\_objmeta\_version.m: add output for better understanding why the test fail.

2011-05-05 16:17 ingo

\* tests/database/@ltpda\_objmeta\_table/test\_objmeta\_submitted.m:

Increase the duration between the submitting time and checking time to an hour. Add an output if the assertion fail

#### 2011-05-05 16:16 miquel

\* @matrix/mcmc.m: bug fix. Also added factory plist as used in linfitsvd

#### 2011-05-05 16:10 ingo

\* +utils/@helper/remove\_cvs\_from\_matlabpath.m: bug fix: Please don't use the tilde '~' for an output of a function if you don't need the variable. This doesn't work for older MATLAB versions!

#### 2011-05-05 14:29 hewitson

\* @time/: minus.m, plus.m: Perform operations using milliseconds rather than seconds. This decreases the numerical errors since we are more likely to be adding numbers which are integers. It doesn't really help for large sample rates (>1000) since we still hit the eps of the machine. But for sample rates like 10Hz, it works better this way.

A test to do is to take a long time—series, split it in to 100 pieces, then join it again and you see that the sample rate is not the same as the original because the individual chunks have slightly wrong t0 values so when they are joined we get gaps at the boundaries which are not one sample long.

#### 2011-05-05 13:35 hewitson

\* @tsdata/collapseX.m: I think the logic was wrong here. We should only set the sample rate, if we actually fitted it (recomputed it) in fitfs. Otherwise we end up with numerical errors creeping in.

Test case:

a = ao.randn(100000,10) as = split(a, plist('chunks', 100)) b = join(as) a.fs  $\sim$ = b.fs

#### 2011-05-04 21:48 mauro

\* @ao/ao.m: Remove the t0 parameter because it was moved inside the factory plist TSDATA\_PLIST

#### 2011-05-04 21:41 mauro

\* @plist/plist.m: Added 't0' parameter to the factory plist TSDATA\_PLIST

#### 2011-05-04 07:29 mauro

\* @smodel/setXunits.m: Support empty string as input An attempt to use a generalized error message

#### 2011-05-04 07:03 mauro

\* +utils/@prog/rstruct.m: Removed dead code Cosmetics

#### 2011-05-04 06:59 mauro

\* @smodel/smodel.m: Going back to xunits to be an empty unit. The empty unit vector was impossible to handle by the constructor from struct

#### 2011-05-03 17:20 hewitson

\* @ltpda\_obj/eq.m: Added a warning identifier.

### 2011-05-03 15:15 ingo

\* tests/database/@ltpda\_objmeta\_table/test\_objmeta\_version.m: I have no idea why this test fail. Maybe older MATLAB versions don't like error messages in the assert-method. One other reason can be that the test machine have installed two LTPDA versions?

#### 2011-05-03 15:13 ingo

\* tests/database/@ltpda\_objmeta\_table/test\_objmeta\_submitted.m: I'm checking the submit time by comparing the submit time and the current time plus 10 minutes. Maybe it is necessary to increase the duration between the submit time and the checking time because our current test runner built all test-objects (here we submit the objects) before we run the tests.

#### 2011-05-03 15:10 ingo

\* tests/database/@ltpda\_fsdata\_table/test\_fsdata\_fs.m: bug fix: Special case if the frequency is NaN because in this case stores the database an empty array [].

#### 2011-05-03 06:19 mauro

\* @ltpda\_uoh/setProperties.m: Use utils.helper.setoutputs to set the outputs

#### 2011-05-02 22:18 mauro

\* @smodel/smodel.m: Make sure the xunits field is a vector of units objects Methods list reorganized Public methods list removed

#### 2011-05-02 16:18 luigi

\* @matrix/linlsqsvd.m: added a simplify for y units

#### 2011-05-02 16:12 luigi

\* @matrix/getObjectAtIndex.m: assign proper name is output name will be empty

### 2011-05-02 11:56 luigi

\* @ao/getdof.m: cosmetics to default plist

#### 2011-05-02 07:23 mauro

\* @smodel/double.m: Properly support empty xvals

### 2011-04-30 14:25 adrien

\* @ao/: gapfillingoptim.m, spsd.m: Correcting factor 2 in dy, and replaced the "nBinsEffs" by "nDofs", the number of degree of freedom of the Chi distributions

### 2011-04-29 17:31 adrien

\* @ao/spsd.m: Debugged, and now working chi-based variance
estimation

#### 2011-04-29 17:02 ingo

\* +utils/@helper/isSubclassOf.m: Add an error for the case that the user uses a class name which is not defined. (like 'foo')

#### 2011-04-29 16:58 ingo

\* +utils/@helper/isSubclassOf.m: Use the MATLAB method lt(metaObj, metaObj) instead of our own method because this method works also for MATLAB 2009b.

#### 2011-04-29 16:39 hewitson

\* @ao/spsd.m: Don't use a MATLAB function name (std) as a variable.

New MATLAB versions don't like this.

#### 2011-04-29 16:25 hewitson

\* +utils/@models/mainFnc.m: Make sure the combined plist is copied to go in the history. Sometimes authors modify the plist inside the model without copying it first, and this breaks rebuilding. So we add this safety measure, even at the slight cost of run-time.

### 2011-04-29 15:54 luigi

\* @ao/confint.m: output data are now collected in a collection object

#### 2011-04-29 11:30 hewitson

\* +utils/@models/mainFnc.m: Before trying to add history, check the object is a subclass of ltpda\_uoh.

#### 2011-04-29 11:30 hewitson

\* tests/models/@ltpda\_builtin\_model\_utp/:
 test\_builtin\_model\_info.m, test\_builtin\_model\_versions.m: Some
 tests only work on user-objects with history, so we need to check
 the object class since we support built-in models of user-objects
 as well.

#### 2011-04-29 09:18 hewitson

\* +utils/@models/makeBuiltInModel.m: Added some more output information and we edit the new model right at the end.

### 2011-04-29 09:16 hewitson

\* +utils/@models/makeBuiltInModel.m: Decided to simplify this for the user since we only support models in extension modules. So now the utility accepts the path to the extension module and creates standard paths within there for the model and for the test class.

#### 2011-04-29 09:06 hewitson

\* +utils/@models/models.m: Added the prototypes for the new model main function and the new model builder.

#### 2011-04-29 09:05 hewitson

\* +utils/@models/: built\_in\_model\_template.m,
built\_in\_model\_unittest\_template.m, makeBuiltInModel.m: A new
utility for making built-in models. The utility uses template
files for the model and for a test-class to build the model and
the test-class where the user specifies. The tests are also run
after the model and test-class are created.

### 2011-04-29 09:04 hewitson

\* +utils/@models/mainFnc.m: A new utility method which allows the main function of built-in models to be reduced to a single call. This also allows us to change this main function without having to touch the model files again. However, we do have to implement this in all model files.

#### 2011-04-28 23:36 mauro

\* @ao/fftfilt.m: Comply with the cell-array container for xvar Use the applyDefaults and utils.helper.setoutputs utilities

#### 2011-04-28 23:31 mauro

\* @ao/: fft.m, ifft.m: Use the applyDefaults and utils.helper.setoutputs utilities

#### 2011-04-28 21:50 mauro

\* @smodel/: setAliasNames.m, setAliasValues.m, setAliases.m, setParameters.m, setParams.m, setTrans.m, setXunits.m, setXvals.m, setXvar.m, setYunits.m: Use the utils.helper.setoutputs to set outputs Code harmonization

#### 2011-04-28 21:09 luigi

\* @ao/confint.m: huge code improvement and restructuring

#### 2011-04-28 17:19 luigi

\* @ao/getdof.m: code improvement

#### 2011-04-28 15:52 mauro

\* @smodel/double.m: Modified according to agreed notes: - accepts only doubles - less checks on values

#### 2011-04-28 15:26 hewitson

\* @LTPDAworkbench/rebuildLibrary.m: Make sure we add any ltpda\_uo subclasses coming from extension modules.

Also cleaned up some dead code.

#### 2011-04-28 15:25 hewitson

\* +utils/@helper/: isSubclassOf.m, helper.m: A new utility which checks if a given class is a subclass of another class.

#### 2011-04-28 14:18 hewitson

\* tests/@ltpda\_test\_runner/get\_tests\_in\_dir.m: There is no need (and in fact it's bad) to add the path during run-time.

#### 2011-04-28 13:00 luigi

\* @ao/getdof.m: method updated, it was broken by a change in history handling

### 2011-04-27 21:44 ingo

\* tests/@ltpda\_utp/ltpda\_utp.m: Add the field testRunner.

### 2011-04-27 21:43 ingo

\* tests/@ltpda\_utp/init.m: Dummy method which we execute after we have build the UTP.

### 2011-04-27 21:42 ingo

\* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: - set the property
'repositoryPlist' to an empty array. - add a function
skipRepoTests() which checks if it is possible to test a
database.

#### 2011-04-27 21:40 ingo

\* tests/@ltpda\_test\_runner/: get\_tests\_for\_class.m, get\_tests\_in\_dir.m: Set the ltpda\_test\_runner to the UTP and executes a init function for the UTP. This is necessary for example for testing the database. We commit in this init() the test objects and uses the stored IDs to check the tables.

### 2011-04-27 21:37 ingo

\* tests/: ao/@test\_ao\_ao\_table/test\_ao\_ao\_table.m,
ao/@test\_ao\_cdata\_table/test\_ao\_cdata\_table.m,
ao/@test\_ao\_fsdata\_table/test\_ao\_fsdata\_table.m,

```
ao/@test ao obimeta table/test ao obimeta table.m,
         ao/@test_ao_tsdata_table/test_ao_tsdata_table.m,
         ao/@test_ao_xydata_table/test_ao_xydata_table.m,
         database/@ltpda_ao_table/ltpda_ao_table.m,
         database/@ltpda_ao_table/test_ao_data_id.m,
         database/@ltpda_ao_table/test_ao_data_type.m,
database/@ltpda_ao_table/test_ao_description.m,
         database/@ltpda_ao_table/test_ao_mdlfilename.m,
         database/@ltpda_ao_table/test_ao_mfilename.m,
         database/@ltpda_cdata_table/ltpda_cdata_table.m, database/@ltpda_cdata_table/test_cdata_xunits.m,
         database/@ltpda_cdata_table/test_cdata_yunits.m,
         database/@ltpda_database/init.m,
         database/@ltpda_database/ltpda_database.m,
         database/@ltpda_fsdata_table/ltpda_fsdata_table.m,
         database/@ltpda_fsdata_table/test_fsdata_fs.m,
         database/@ltpda_fsdata_table/test_fsdata_xunits.m,
         database/@ltpda_fsdata_table/test_fsdata_yunits.m,
         database/@ltpda_objmeta_table/init.m,
         database/@ltpda_objmeta_table/ltpda_objmeta_table.m,
         database/@ltpda_objmeta_table/test_objmeta_additional_authors.m,
         database/@ltpda objmeta table/test objmeta additional comments.m,
         database/@ltpda_objmeta_table/test_objmeta_analysis_desc.m,
         database/@ltpda_objmeta_table/test_objmeta_author.m,
database/@ltpda_objmeta_table/test_objmeta_created.m,
         database/@ltpda_objmeta_table/test_objmeta_experiment_desc.m,
         database/@ltpda_objmeta_table/test_objmeta_experiment_title.m,
         database/@ltpda_objmeta_table/test_objmeta_hostname.m,
         database/@ltpda_objmeta_table/test_objmeta_ip.m,
         database/@ltpda_objmeta_table/test_objmeta_keywords.m,
         database/@ltpda objmeta table/test objmeta name.m,
         database/@ltpda_objmeta_table/test_objmeta_obj_type.m,
         database/@ltpda_objmeta_table/test_objmeta_os.m,
database/@ltpda_objmeta_table/test_objmeta_quantity.m,
         database/@ltpda objmeta table/test objmeta reference ids.m,
         database/@ltpda_objmeta_table/test_objmeta_submitted.m,
         database/@ltpda_objmeta_table/test_objmeta_validated.m,
         database/@ltpda_objmeta_table/test_objmeta_vdate.m,
         database/@ltpda_objmeta_table/test_objmeta_version.m,
         database/@ltpda tsdata table/ltpda tsdata table.m,
         database/@ltpda_tsdata_table/test_tsdata_fs.m,
         database/@ltpda_tsdata_table/test_tsdata_nsecs.m,
database/@ltpda_tsdata_table/test_tsdata_t0.m,
         database/@ltpda_tsdata_table/test_tsdata_xunits.m,
         database/@ltpda_tsdata_table/test_tsdata_yunits.m,
         database/@ltpda_xydata_table/ltpda_xydata_table.m,
         database/@ltpda_xydata_table/test_xydata_xunits.m,
database/@ltpda_xydata_table/test_xydata_yunits.m: new unit tests
         which tests the different tables of a database.
2011-04-27 21:35 ingo
       * +utils/@helper/objdisp.m: displays the class ltpda test runner.
2011-04-27 19:27 adrien
       * @ssm/: cpsdForCorrelatedInputs.m, cpsdForIndependentInputs.m:
         future replacement function for ssm/psd and ssm/cpsd
2011-04-27 19:21 adrien
       * @ssm/CPSD.m: correcting description
2011-04-27 19:20 adrien
       * @ao/gapfillingoptim.m: Two bug removed : one wrong value for a
         criterion and a parameter which was wrongly removed
2011-04-27 19:17 adrien
```

\* @ao/spsdSubtraction.m: debug : a sum too much

#### 2011-04-27 19:17 adrien

\* @ao/spsd.m: Now standard deviation is really based on Chi distribution laws

#### 2011-04-27 18:53 ingo

\* tests/plotting/:
 aoplotter/@test\_aoplotter\_aoplotter/test\_aoplotter\_aoplotter.m,
 aoplotter/@test\_aoplotter\_singlePlots/test\_aoplotter\_singlePlots.m,
 plotter/@test\_plotter\_plotter/test\_plotter\_plotter.m: Add
 constructor

### 2011-04-27 18:52 ingo

\* tests/models/: @ltpda\_builtin\_models\_filterbank\_utp/Contents.m, @ltpda\_builtin\_models\_miir\_utp/Contents.m: remove Contents file.

#### 2011-04-27 14:45 hewitson

\* @LTPDAprefs/: LTPDAprefs.m, cb\_addModelPath.m, cb\_guiClosed.m, cb\_removeModelPath.m, loadPrefs.m: Remove support for directories of built-in models. The user is warning when the preferences are loaded if they have some directory paths set. The user is told to make an extension module and to look in the help to see how to do it.

### 2011-04-27 13:49 hewitson

\* @ltpda\_obj/ltpda\_obj.m: Changed the prototype for eq and ne, thus allowing the multiple output of eq to work now.

#### 2011-04-27 13:40 hewitson

\* @pest/eval.m: Some proper preprocessing of the input x values according to the rules in the help. We also support x values which are an input array of AOs. Not sure if this breaks other things, but it was anyway broken as it was.

#### 2011-04-27 12:58 hewitson

\* @mfir/fromAO.m: Handle the case that the plist doesn't contain a specwin object but rather just the parameters for it, since we now don't add specwin objects to the history plist.

#### 2011-04-27 12:12 hewitson

\* @ltpda\_uoh/addHistory.m: Bug fix: we also need to capture the window length when converting a specwin object to its plist equivalent values.

#### 2011-04-27 11:59 hewitson

\* @ltpda\_obj/eq.m: Bug fix: allow for the case of no outputs.

#### 2011-04-27 08:46 hewitson

\* @ltpda\_obj/eq.m: Trying to allow an additional output to eq() so as to retrieve the message. So far I couldn't make this work, perhaps because this is a method we override. What I've done so far is to use warning() instead of just displaying the message. This allows us to retrieve the message via lastwarn(). Not perfect, but useful for the unit tests. I'll leave the other code in place in case I figure out how to return an additional output from eq().

### 2011-04-27 07:41 mauro

\* @ao/: lpsd.m, psd.m: Help harmonization

2011-04-27 07:40 mauro

\* @plist/plist.m: Help cosmetics and harmonization

#### 2011-04-22 23:14 mauro

\* @param/setDefaultOption.m: Support the case where the option is a paramValue. This happens with the current implementation of plist/applyDefaults, when a method calls another method and inherits the plist, and the plist has paramValues in This should fix the broken ao/buildWhitener1D

#### 2011-04-21 07:41 mauro

\* @plist/plist.m: Removed mention of specwin objects

#### 2011-04-21 07:37 mauro

\* +utils/@helper/process\_spectral\_options.m: Throw an error if the
 'win' parameter is a specwin. This is usually not a problem since
 applyDefaults picks up the window name in any case

#### 2011-04-20 15:53 mauro

\* @plist/applyDefaults.m: We loop over the user input parameters, so we do not need to find them Cosmetics

### 2011-04-20 15:22 hewitson

\* @plist/applyDefaults.m: A more sensible approach to applying the defaults. We loop over the user plist rather than the default plist and check that the requested parameter is in the default plist.

#### 2011-04-20 15:17 hewitson

\* @ltpda\_uoh/addHistory.m: We remove specwin objects from the history plist because they can be potentially very heavy. Instead we just replace with the window name and the psll if needed.

### 2011-04-20 11:04 congedo

\* @ao/tdfit.m: removed 'internal' flag.

### 2011-04-20 09:49 congedo

\* @ao/tdfit.m: updated.

### 2011-04-20 09:27 congedo

\* @ao/xfit.m: few things corrected. changed names of variables to 'dummy'.

#### 2011-04-19 22:41 mauro

\* @ao/setFs.m: Removed unnecessary step

#### 2011-04-19 20:48 ingo

\* @ao/: abs.m, acos.m, angle.m, asin.m, atan.m, conj.m, cos.m, det.m, diag.m, imag.m, inv.m, log.m, log10.m, mean.m, median.m, mode.m, norm.m, phase.m, real.m, round.m, sign.m, sin.m, sqrt.m, std.m, sum.m, svd.m, tan.m, uminus.m, unwrap.m, var.m: Add the persistent stuff again to the method because we had problems to have the persistent variable at a central position.

### 2011-04-19 20:18 ingo

\* @ao/split.m: Use another function to call a method from outside the ltpda-class-path.

### 2011-04-19 19:26 ingo

\* @smodel/: setValues.m, setXvals.m: bug fix? I don't now if it is

right nut it fixes the bug in test ao bilinfit.

### 2011-04-19 19:05 ingo

\* @ao/: dx.m, dz.m, x.m, y.m, z.m: Use a dummy variable name instead of '~' for multiple outputs if we don't need the variable. The '~' will fail for older MATLAB versions.

#### 2011-04-19 18:24 ingo

\* +utils/@helper/collect\_objects.m: bug fix: Sometimes defines a callerIsMethod-command the variable-names as an empty array because we don't need them for the history. But this causes an issue if we access to the inside objects -> create empty-cell with the correct size.

#### 2011-04-19 18:20 ingo

\* @plist/getDefaultAxisPlist.m: remove for a workaround the storing of the persistent PLIST. This make problems with test\_ao\_spikecleaning

#### 2011-04-19 18:00 ingo

\* @ltpda\_uoh/ltpda\_uoh.m: define the prototype of the hidden test function which calls a method from inside the LTPDA class-path (necessary for the 'internal' test) as a public and hidden method. This is necessary because a static method doesn't add en entry to dbstack().

#### 2011-04-19 17:56 ingo

\* @ao/split.m: bug fix: Splitting by chunks calls the split function again but it calling the split-function with samples. The problem is that the second split-command doesn't add history because it is called from a class-method and no history is added. I have soled this issue by calling a helper-function from outside the class-methods which calls the split.

#### 2011-04-19 16:26 ingo

\* @time/parse.m: Bug fix? It is necessary for parsing a time string to set also the java Locale (ISO Language Code). My machine have the locale 'GERMAN' and it was not possible to parse the timezone 'CET'. It could only parse the German 'MEZ' (same meaning but in German). Isn't it stupid.

### 2011-04-19 15:53 mauro

\* @ao/: setFs.m, setT0.m: Simplify the interface in the case of call from a method, going to 2 inputs only. — multiple objects can be passed in via a vector — multiple values can be passed in via a cell array

#### 2011-04-19 12:40 ingo

\* @ltpda\_uoh/testCallerIsMethod.m: update help section.

#### 2011-04-19 07:24 mauro

\* @plist/applyDefaults.m: What I did was not really smart. The plist could be everywhere, and with any objects. Moving back to 1.5

#### 2011-04-18 22:25 mauro

\* @ao/setFs.m: An attemp to make something better: — supports plists with more than one parameters — call applyDefault to handle the non-used parameters

### 2011-04-18 22:20 mauro

\* @plist/applyDefaults.m: Supporting also empty plists

#### 2011-04-18 22:04 mauro

\* @plist/applyDefaults.m: In the case the outputs are two plists (I hope it is the most common one) do not call utils.helper.collect\_objects, so to speed up things

### 2011-04-18 21:51 luigi

\* tests/models/@ltpda\_builtin\_models\_filterbank\_utp/: Contents.m,
 ltpda\_builtin\_models\_filterbank\_utp.m: test infrastructure for
 filterbank models

#### 2011-04-18 21:48 mauro

\* @ltpda\_uo/processSetterValues.m: I don't think we should insist on plist with only one element, since we want to call applyDefault before this

#### 2011-04-18 21:46 mauro

\* @ao/buildWhitener1D.m: Fixed also for the case of lpsd.

#### 2011-04-18 21:45 mauro

\* @ao/inv.m: Fixed comment

#### 2011-04-18 20:12 ingo

\* tests/@ltpda\_uo\_tests/test\_name.m: update UTP because we have changes the default name from 'None' to ''

### 2011-04-18 20:11 ingo

\* tests/@ltpda\_obj\_tests/test\_copy.m: WE have here the problem because we can not check if we have different handles. The command: obj ~= copyObj will call the ltpda-ne method and this will not pass for a data-object. The objects doesn't have the same memory-space but our eq-method will check the properties and not the memory-space. isequal doesn't work because it also calls eq.

The best way is to rename our eq-method to isequal.

### 2011-04-18 18:57 ingo

\* @LTPDAworkbench/mpl2jpl.m: If we want to create an empty
java-PLIST then should we create an empty PLIST with the name =
'' and not 'None'

#### 2011-04-18 18:55 ingo

\* @ao/: fromDatafile.m, fromDataInMAT.m: Special case for for the type = 'cdata' If no 'columns' are specified then reads this constructor all data into one AO. (default behaviour)

#### 2011-04-18 18:53 ingo

\* @ao/: elementOp.m, melementOp.m: bug fix: Due to the case that we have changed the default value for the property 'name' must we also change the condition for setting a special name. Now is it necessary to check for an empty 'name' as for 'None'

#### 2011-04-18 18:53 ingo

\* @ao/ao.m: Change some values the the sets: 'from mat data file'
-> 'columns' = [] 'from ascii file' -> 'columns' = [] 'from
polinomial' -> 'type' = 'tsdata'

### 2011-04-18 18:49 ingo

\* @parfrac/fromPzmodel.m, @parfrac/fromRational.m, @pest/char.m, @pzmodel/fromLISO.m, @pzmodel/fromParfrac.m, @pzmodel/fromRational.m, @rational/fromParfrac.m, @rational/fromPzmodel.m, @mfir/fromA.m, @mfir/fromAO.m, @mfir/fromPzmodel.m, @mfir/fromStandard.m, @miir/fromAB.m, @miir/fromAllpass.m, @miir/fromLISO.m, @miir/fromParfrac.m, @miir/fromPzmodel.m, @miir/fromStandard.m, @ao/fromComplexDatafile.m, @ao/fromGEOserver.m, @ao/fromNDS.m, @ao/fromPest.m, @ao/fromPzmodel.m, @ao/fromSModel.m, @ao/fromSpecWin.m, @ao/fromWaveform.m, @ltpda\_tf/resp.m: bug fix: Due to the case that we have changed the default value for the property 'name' must we also change the condition for setting a special name. Now is it necessary to check for an empty 'name' as for 'None'

#### 2011-04-18 17:13 adrien

\* @ao/spsdSubtraction.m: Correcting some indexing error in loops

#### 2011-04-18 17:11 adrien

\* @ao/gapfillingoptim.m: removing useless code, deprecated option, and now displaying expected computation time

#### 2011-04-18 11:17 mauro

\* @ao/ltpda\_fitChiSquare.m: Since I have heard nothing against it,
I proceed removing this method

#### 2011-04-17 23:28 adrien

\* @ssm/: CPSD.m, PSD.m, bode.m, kalman.m, resp.m: BIG CHANGE IN THE SSM FUNCTIONS PRODUCING AOs !!! (+ minor debug of ssm/bode) The now return matrices of objects, and support the callerIsMethod facility. Additionnaly bug was corrected in ssm/bode where the rest(:) used to be thrown away

#### 2011-04-17 23:26 adrien

\* @ssm/simulate.m: Small code copy&paste to make it better and modified header (tells about matrices)

### 2011-04-17 23:24 adrien

\* @matrix/spsdSubtraction.m: Wrapper around ao/spsdSubtraction so matrices can be subtracted. Still pest+eval does not work, but residual are provided anyway.

### 2011-04-17 23:23 adrien

\* @ao/spsdSubtraction.m: The new function with the new name (exactly same code as in optSubtraction right now)

### 2011-04-17 23:22 adrien

\* @ao/optSubtraction.m: Changes in the inputs/outputs (better aos with history if needed...) Will be rmoved and replaced by spsdSubtraction, which is a more meaningful name.

#### 2011-04-17 23:20 adrien

\* @ao/gapfillingoptim.m: Updated output (returns aos with better content, history...) and removed "z-test" which is less precise and not faster than the chi2 distributed test

### 2011-04-17 23:18 adrien

\* @ao/spsd.m: more explicit description header

### 2011-04-17 17:54 ingo

\* @ao/fromDatafile.m: bug fix: The command ao(values) inside this

fromDatafile doesn't add history to the AO because we suppress the history with the callerIsMethod flag. This is the reason why it is necessary to add the history in this file.

#### 2011-04-17 17:51 ingo

\* @ao/ctranspose.m: Bug fix. The command for the getInfo with a specified set failed. For example: ao.getInfo('ctranspose', 'Default') of ao.getInfo('ctranspose', 'None')

#### 2011-04-17 17:48 ingo

\* @smodel/: addParameters.m, setParameters.m: new setter methods

#### 2011-04-17 13:07 hewitson

\* @ao/var.m: Call the new factory methods for the info and default plist and fix a bug in call to applymethod — we need to pass all inputs otherwise the user's plist will be ignored.

#### 2011-04-17 13:03 hewitson

\* @ao/: tan.m, unwrap.m: Call the new factory methods for the info and default plist.

#### 2011-04-17 12:59 hewitson

\* @ao/: sum.m, svd.m: Restructured along the lines of Ingo's inv method and added calls to the new factor methods for default plist and info.

#### 2011-04-17 12:58 hewitson

\* @ao/std.m: Restructured along the lines of Ingo's inv method.

#### 2011-04-17 12:54 hewitson

\* @ao/std.m: Call the new factory methods for the info and default plist and fix a bug in call to applymethod — we need to pass all inputs otherwise the user's plist will be ignored.

#### 2011-04-17 12:53 hewitson

\* @ao/sqrt.m: Call the new factory methods for the info and default plist.

#### 2011-04-17 12:50 hewitson

\* @ao/: sign.m, sin.m: Call the new factory methods for the info and default plist.

#### 2011-04-17 12:44 hewitson

\* @ao/: phase.m, real.m, round.m: Call the new factory methods for the info and default plist.

### 2011-04-17 12:40 hewitson

\* @ao/norm.m: Restructured along the lines of Ingo's inv method and added calls to the new factor methods for default plist and info.

#### 2011-04-17 12:39 hewitson

\* @ao/: mean.m, median.m, mode.m: Call the new factory methods for the info and default plist and fix a bug in call to applymethod we need to pass all inputs otherwise the user's plist will be ignored.

#### 2011-04-17 12:30 hewitson

\* @ao/: exp.m, imag.m, inv.m, log.m, log10.m: Call the new factory methods for the info and default plist.

### 2011-04-17 12:27 hewitson

\* @ao/: det.m, diag.m, eig.m: Restructured along the lines of Ingo's inv method and added calls to the new factor methods for default plist and info.

#### 2011-04-17 12:25 hewitson

\* @ao/: angle.m, asin.m, atan.m, conj.m, cos.m: Call the new factory methods for the info and default plist.

#### 2011-04-17 12:11 hewitson

\* @ao/acos.m: Call the new factory methods for the info and default plist.

#### 2011-04-17 11:23 hewitson

\* @ao/uminus.m: Call the new factory methods for the info and default plist.

#### 2011-04-17 11:22 hewitson

\* @plist/plist.m: Some cleaning up of the factory AXIS plists and added the prototype for the getDefaultAxisPlist method.

#### 2011-04-17 11:21 hewitson

\* @plist/getDefaultAxisPlist.m: static method to return the default plist for methods that support the 'axis' option.

#### 2011-04-17 11:21 hewitson

\* @minfo/setMpackage.m: Setter for the mpackage field.

#### 2011-04-17 11:20 hewitson

\* @minfo/minfo.m: add the prototype for the getInfoAxis method.

#### 2011-04-17 11:20 hewitson

\* @minfo/getInfoAxis.m: a static method to return the info object for methods supporting the 'axis' option.

### 2011-04-17 11:19 hewitson

\* @data3D/applymethod.m: Call the passed getDefaultPlist handle with the '1D' set and return the plist after applying the defaults.

### 2011-04-17 11:13 hewitson

\* @cdata/applymethod.m, @data2D/applymethod.m: Call the passed getDefaultPlist handle with the '1D' set and return the plist after applying the defaults.

#### 2011-04-17 11:12 hewitson

\* @ao/applymethod.m: pass the calling of getDefaultPlist to the data applymethod. There the correct set can be chosen based on the data type.

#### 2011-04-17 11:12 hewitson

\* @ao/abs.m: Introduce a central getInfo and getDefaultPlist for methods supporting the 'axis' option.

#### 2011-04-17 07:36 hewitson

\* @plist/plist.m: Add the option 'xy' since many of the AO methods now use the 3D plist. Even though we don't support the 'xy' for

data3D yet, this at least allows it to work for the data2D objects. The whole data stuff is a mess at the moment anyway. The default axis for the 3D axis plist is 'y', which means when the user does abs(ao(data3D)) it works on 'y', which is certainly not expected behaviour. We need a redesign of the data classes to fix this.

#### 2011-04-15 17:02 ingo

\* @ao/ao.m: Add prototype checkDataType

#### 2011-04-15 17:02 ingo

\* @ao/checkDataType.m: new method which throws an error if the input AOs have a specified data-type. The example will throw an error if the AO have a data-object 'fsdata' aos.checkDataType('fsdata');

#### 2011-04-15 17:00 ingo

\* @ao/inv.m: new prototype for methods which uses applymethod and which have to check the data-type of the AOs.

#### 2011-04-15 16:02 adrien

\* @ao/gapfillingoptim.m: Improved direct solver supports the case of the spectrum minimization with no HF windowing (another 2x faster, but sometimes slightly biased, sometimes better) + typo correction + renaming in the code where it was not understandable.

### 2011-04-14 21:21 adrien

\* @ao/gapfillingoptim.m: Great improvements using additionnal direct solver (>50x faster) - added optionnal direct solver (it is the default option) making the code much-much faster -> better numerical results

#### 2011-04-14 21:19 adrien

\* @ao/optSubtraction.m: Great improvements using direct solver +
weighting - removal of global data - user can choose logCoef for
frequency average scaling if he wants to - normalization scheme
corrected -> better numerical results

### 2011-04-13 06:51 mauro

\* @ao/gnuplot.m: Bug fix: plotinfo can now be an empty array, not necessarily a plist Implemented the applyDefault step Cosmetics

### 2011-04-12 23:45 adrien

\* @ao/gapfillingoptim.m: many improvements — a factor 2 corrected in the chi2 — the log.likelihhod is improved by using gammaln instead of log(gamma) — the global variable optData is cleared

#### 2011-04-12 23:44 adrien

\* @ao/optSubtraction.m: many improvements — an iterative chi2 based criterion with a log-likelihood maximization — Convergence of iterations is now stopped whenever progress is too small — the signals to subtract are scaled — the global variable optData is cleared

### 2011-04-11 22:00 ingo

\* @smodel/setAliasValues.m: Use mfilename('class') instead of the string: 'smodel'

### 2011-04-11 21:59 ingo

\* @smodel/setAliasNames.m: new version of this setter-method.

### 2011-04-11 21:58 ingo

\* @smodel/setParams.m: - modify the handling of the inputs for example setParams('a', 'b') sets a wrong value - bug fix: The number of the 'values' and 'params' are now the same if we set at least one value. --> setParams('a', 'b') + setParams('a', 1) - simplify the setting of the properties. - use the EMPTY\_CELL of the paramValue class instead of {1, {}, paramValue.OPTIONAL}

#### 2011-04-11 21:54 ingo

\* @smodel/setValues.m: Use the EMPTY\_CELL paramValue factory instead of {1, {}, paramValue.OPTIONAL}

### 2011-04-11 21:52 ingo

\* @smodel/: setTrans.m, setXvals.m, setXvar.m: Change in getDefaultPlist the default value from an empty string into an empty cell.

#### 2011-04-11 21:51 ingo

\* @smodel/display.m: Add the output if the alias fields.

### 2011-04-11 21:51 ingo

\* @smodel/: addAliases.m, clearAliases.m, setAliases.m: new setter method which sets/adds/clears the alias names and value.

#### 2011-04-11 21:49 ingo

\* +utils/@helper/setoutputs.m: I wonder but I have checked that for an uniformly distributed number of outputs is the if case faster than the switch.

#### 2011-04-11 21:48 ingo

\* +utils/@helper/helper.m: add prototype for the new method:
 getDefaultValue

### 2011-04-11 21:47 ingo

\* +utils/@helper/getDefaultValue.m: Returns the default value of an object and given property name.

#### 2011-04-11 16:46 adrien

\* @ao/gapfillingoptim.m: Now gap-filling with a proper chi-square statistical test.

#### 2011-04-11 16:22 luigi

\* @ao/buildWhitener1D.m: default parameters updated. Now provides a more sensible output for the documentation example

#### 2011-04-11 12:24 mauro

\* @ao/egmotion.m: Cosmetics

#### 2011-04-11 12:12 luigi

\* @ao/buildWhitener1D.m: this shoul fix the warning caused by non default parameters in psd and lpsd

### 2011-04-11 11:10 luigi

\* @ao/eqmotion.m: set prefixes simplify to false

### 2011-04-10 10:04 hewitson

\* @ao/elementOp.m: If the name is empty, use a '?' placeholder.

### 2011-04-10 08:45 hewitson

\* @ao/iplot.m: If the object name is emtpy, use a '?' as placeholder.

#### 2011-04-09 19:04 hewitson

\* @LTPDAprefs/setPreference.m: Bug fix: somehow some capitalization has disappeared.

#### 2011-04-09 18:57 hewitson

\* @pz/pz.m: Bug fix. A typo has crept in.

#### 2011-04-09 09:44 hewitson

\* @ao/: diag.m, eig.m, norm.m, det.m, inv.m, svd.m: bug fixes. It seems MATLAB doesn't like indexed variables as outputs.

#### 2011-04-09 08:58 hewitson

\* +utils/@helper/callerIsMethod.m: Code hardening. Only get the classname if the test\_\* method actually came from a class.

### 2011-04-09 08:58 hewitson

\* @ltpda\_uo/save.m: Somehow a broken save got committed.

#### 2011-04-08 16:31 hewitson

- \* @ao/: ctranspose.m, ln.m, transpose.m: 1) transpose has a new plist key 'complex' where you can choose to do complex transpose or not (default = not)
  - 2) ctranspose is now just a wrapper of transpose by using the new ltpda\_run\_method function
  - 3) In is now a wrapper of log

#### 2011-04-08 15:59 hewitson

\* +utils/@helper/callerIsMethod.m: Just added a note with some thoughts.

### 2011-04-08 15:59 hewitson

\* @ao/elementOp.m: 1) use applyDefaults 2) honour the y shape for mtimes and mrdivide. The other element ops are more forgiving and allow things like [1:10] + [1:10]'

### 2011-04-08 15:58 hewitson

\* @ao/: ctranspose.m, transpose.m: Fixed versions. The plist options are removed because it makes no sense to transpose the different data fields independently.

#### 2011-04-08 15:45 luigi

\* tests/models/@ltpda\_builtin\_models\_miir\_utp/: Contents.m,
 ltpda\_builtin\_models\_miir\_utp.m: added a test class for built-in
 miir models

#### 2011-04-08 14:39 luigi

\* @ao/eqmotion.m: updated to use calllerismethod

### 2011-04-08 14:34 hewitson

\* +utils/@helper/callerIsMethod.m: Unfortunately we can't do this callerIsMethod trick in the built-in models. It will involve some big changes in the existing models and that's too much this close

to the release.

#### 2011-04-08 13:56 hewitson

\* @ssm/bode.m: Added a new plist option for 'numeric output' because it was not possible to distinguish the different use cases automatically. For the fitters, they should set this numeric parameter to true to get numeric output.

Also a bug fix to make sure the default plist is used.

#### 2011-04-08 12:34 mauro

\* @msym/msym.m: Cosmetics

#### 2011-04-08 12:34 mauro

\* @minfo/tohtml.m: Swapped the plist section with the minfo section. I was sick of scrolling down to go to the parameters section.

#### 2011-04-08 12:34 mauro

\* +utils/@helper/displayMethodInfo.m: Typos fixed in help

#### 2011-04-08 12:25 hewitson

\* tests/@ltpda\_uoh\_tests/: test\_setPlotinfo.m, test\_setProcinfo.m: Since the plist has no UUID anymore, we need to check another way that the plist was copied. Do it by changing one parameter after the setting.

#### 2011-04-08 12:21 hewitson

\* @ltpda\_uoh/setPlotinfo.m: We must copy the plist before assigning it to the plotinfo.

#### 2011-04-08 11:18 mauro

\* @ltpda\_uo/load.m: Added some documentation

#### 2011-04-08 11:12 mauro

\* @ltpda\_uo/load.m: Added a static method to load multiple objects from a file. Very crude at the moment ...

### 2011-04-08 11:11 mauro

\* @ltpda\_uo/save.m: Help updated

### 2011-04-08 10:56 hewitson

\* @ao/bilinfit.m, @ao/delay.m, @ao/detrend.m, @ao/diag.m, @ao/double.m, @ao/dsmean.m, @ao/find.m, @ao/fromProcinfo.m, @ao/ifft.m, @ao/integrate.m, @ao/mcmc.m, @ao/mdc1\_ifo2acc\_inloop.m, @ao/mdc1\_ifo2control.m,
@ao/mdc1\_x2acc.m, @ao/optSubtraction.m, @ao/or.m, @ao/plus.m, @ao/polynomfit.m, @ao/psd.m, @ao/rms.m, @ao/round.m, @ao/scale.m, @ao/search.m, @ao/select.m, @ao/setDx.m, @ao/setDy.m, @ao/setXY.m, @ao/setYunits.m, @ao/smallvectorfit.m, @ao/sqrt.m, @ao/y.m, @ao/zDomainFit.m, @ao/abs.m, @ao/atan2.m, @ao/average.m, @ao/cov.m, @ao/diff.m, @ao/downsample.m, @ao/exp.m, @ao/gapfilling.m, @ao/getdof.m, @ao/gt.m, @ao/hist.m, @ao/hypot.m, @ao/intersect.m, @ao/inv.m, @ao/le.m, @ao/lincom.m, @ao/linfit.m, @ao/mcmc\_td.m, @ao/mdc1\_cont2act\_utn.m,
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@ao/complex.m, @ao/conj.m, @ao/consolidate.m, @ao/cpsd.m, @ao/dft.m, @ao/dropduplicates.m, @ao/dy.m, @ao/eig.m,

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@ao/evaluateModel.m, @ao/fftfilt.m, @ao/firwhiten.m, @ao/imag.m,
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@ao/demux.m, @ao/det.m, @ao/export.m, @ao/fft.m,
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@ao/iplotyy.m, @ao/join.m, @ao/len.m, @ao/linSubtract.m,
@ao/mpower.m, @ao/noisegen1D.m, @ao/nsecs.m, @ao/offset.m,
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@ao/setUnitsForAxis.m, @ao/setY.m, @ao/spikecleaning.m,
@ao/svd.m, @ao/unwrap.m, @ao/whiten2D.m, @ao/xfit.m,
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@filterbank/generateConstructorPlist.m, @filterbank/resp.m,
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@plist/getIndexForKey.m, @plist/getKeys.m,
@plist/getOptionsForParam.m, @plist/getParamValueForParam.m,
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@plist/setOptionsForParam.m, @plist/setSelectionForParam.m,
@plist/shouldIgnore.m, @plist/simplify.m, @plist/string.m,
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@ssm/optimiseForFitting.m, @ssm/reorganize.m, @ssm/reshuffle.m,
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@pest/setCorr.m, @pest/setCov.m, @pest/setDof.m, @pest/setDy.m,
@pest/setDyForParameter.m, @pest/setModels.m, @pest/setNames.m,
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@repogui/cb_condPlusBtn.m, @repogui/cb_connect.m,
@repogui/cb_executeQuery.m, @repogui/cb_fieldSelect.m,
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@repogui/cb select db.m, @repogui/cb select repo.m,
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@smodel/ifourier.m, @smodel/rdivide.m, @smodel/setXvals.m,
@smodel/smodel.m, @ltpda_uoh/clearHistory.m,
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@smodel/linearize.m, @smodel/mrdivide.m, @smodel/op.m,
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@ssmblock/containsPort.m, @ssmblock/getPortsWithName.m,
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@pzmodel/pzmodel.m, @pzmodel/rdivide.m, @pzmodel/setDelay.m,
@pzmodel/setGain.m, @pzmodel/setPoles.m, @pzmodel/setZeros.m,
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@ltpda_filter/setHistout.m, @miir/char.m,
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@parfrac/getlowerFreq.m, @parfrac/getupperFreq.m,
@parfrac/parfrac.m, @pzmodel/fngen.m, @pzmodel/simplify.m,
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@rational/char.m, @rational/display.m,
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@specwinViewer/cb_plotTime.m, @specwinViewer/cb_selectWindow.m,
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@miir/display.m, @modelViewer/buildObject.m,
@modelViewer/buildParamsPanel.m, @modelViewer/cb_buildModel.m,
@modelViewer/getParamsFromPanel.m, @modelViewer/modelViewer.m,
@unit/HzToS.m, @LTPDARepositoryManager/copyObjects.m,
@LTPDARepositoryManager/display.m,
@LTPDARepositoryManager/executeQuery.m,
@LTPDARepositoryManager/findConnections.m,
@LTPDARepositoryManager/getConnection.m,
@LTPDARepositoryManager/getSinfo.m,
@LTPDARepositoryManager/listConnections.m,
@LTPDARepositoryManager/newConnection.m,
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@constructor/constructor.m, @fsdata/getFfromYFs.m,
@sigBuilder/cb_buildExport.m, @sigBuilder/cb_buildView.m,
@sigBuilder/cb_clearSignals.m, @sigBuilder/cb_removeSignal.m,
@sigBuilder/cb_toggleAddState.m, @sigBuilder/refreshSignalList.m,
@sigBuilder/sigBuilder.m, @specwin/kaiser_w3db.m,
@specwin/win_bartlett.m, @specwin/win_fthp.m,
@specwin/win_hamming.m, @specwin/win_hft144d.m,
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@unit/sToHz.m, @unit/setVals.m, @data2D/plus.m, @data3D/plus.m,
@repogui2/buildConditions.m, @repogui2/buildConnectPanel.m,
@repogui2/buildQueryPanel.m, @repogui2/buildRetrievePanel.m,
@repogui2/buildSubmitPanel.m, @repogui2/cb_condPlusBtn.m,
@repogui2/cb_connect.m, @repogui2/cb_executeQuery.m,
@repogui2/cb_fieldSelect.m, @repogui2/cb_get_dbs.m,
@repogui2/cb_mainfigClose.m, @repogui2/cb_select_db.m,
@repogui2/cb_select_repo.m, @repogui2/cb_tableSelect.m,
@repogui2/getFields.m, @repogui2/getTables.m, @repogui2/repogui2.m, @repogui2/sqlResultsGUI.m,
@specwin/kaiser_alpha.m, @specwin/kaiser_flatness.m,
@specwin/kaiser_rov.m, @specwin/win_bh92.m, @specwin/win_ftni.m,
@specwin/win_ftsrs.m, @specwin/win_hft116d.m,
@specwin/win_hft196d.m, @specwin/win_hft95.m,
@specwin/win_nuttall3.m, @specwin/win_nuttall4.m,
@specwin/win_nuttall4b.m, @specwin/win_nuttall4c.m,
@specwin/win_sft4f.m, @specwin/win_sft5f.m, @specwin/win_sft5m.m,
@launchBay/launchBay.m, @ltpda_obj/eq.m, @ltpda_obj/get.m, @ltpda_obj/isprop.m, @ltpda_obj/ne.m, @ltpda_uo/bsubmit.m,
@ltpda_uo/save.m, @ltpda_uo/submit.m, @ltpda_uo/update.m,
@repogui2/buildquery.m, @repogui2/setWorkspaceObjsList.m,
@timespan/char.m, @timespan/display.m, @timespan/double.m,
@timespan/generateConstructorPlist.m, @timespan/setEndT.m,
@timespan/setStartT.m, @timespan/timespan.m,
@workspaceBrowser/cb_repoManager.m,
@workspaceBrowser/getSelectedObjects.m,
@workspaceBrowser/getSelectedVarNames.m, @aoplotter/aoplotter.m,
@ltpda_tf/resp.m, @ltpda_tf/setIunits.m, @ltpda_tf/setOunits.m,
@ltpda_tf/simplifyUnits.m, @msym/msym.m,
@plotterFactory/plotterFactory.m, @stattest/char.m,
@stattest/display.m, @stattest/generateConstructorPlist.m,
@stattest/setData.m, @stattest/stattest.m,
@tsplotter/tsplotter.m: Changed "Parameter sets" to "Parameters
Description"
```

place.

### 2011-04-07 21:25 hewitson

\* @ao/: angle.m, asin.m, det.m, diag.m, eig.m, exp.m, imag.m, inv.m, ln.m, log.m, mean.m, median.m, mode.m, phase.m, real.m, round.m, sign.m, sin.m, std.m, svd.m, tan.m, acos.m, atan.m, conj.m, cos.m, log10.m, norm.m, sqrt.m, sum.m, uminus.m, unwrap.m, var.m: A first run through using the new applymethod. It turns out that many of these methods can not be as simple as ao/abs, so we still need to do some cleaning up here.

#### 2011-04-07 21:23 hewitson

\* @ao/applymethod.m: We need to set the second output for the getInfo call.

#### 2011-04-07 20:59 hewitson

\* @plist/applyDefaults.m: And we also need to copy the default plist in the trivial case of only one input plist.

#### 2011-04-07 20:55 hewitson

\* @plist/applyDefaults.m: We need to copy the default plist because the new philosophy is to modify the default plist by overriding with the user inputs.

#### 2011-04-07 19:03 hewitson

\* @ao/: mrdivide.m, mtimes.m, or.m, rdivide.m: Use the new elementOp structure.

#### 2011-04-07 19:02 hewitson

\* @ao/elementOp.m: bug fix for the getInfo call.

#### 2011-04-07 16:52 hewitson

\* @LTPDAprefs/cb\_guiClosed.m: Further attempts to fix the prefs window problem, but so far no success.

### 2011-04-07 16:52 hewitson

\* @LTPDAworkbench/run.m: Use the new MATLAB java interface and clear the preferences from the pipeline when done.

### 2011-04-07 16:51 hewitson

\* @plist/getKeys.m: Bug fix for empty plist.

### 2011-04-07 16:51 hewitson

\* @ao/: minus.m, times.m: Updated to the new elementOp style.

### 2011-04-07 15:18 mauro

\* @param/setDefaultOption.m: Added (a little) support for specwin as possible value for a parameter. In this case, it tries to match the window name with the default option name. This assumes we do not store specwin objects as optional values for the spectral window.

### 2011-04-07 13:14 luigi

\* @ao/ltp\_ifo2acc.m: removing ltp\_ifo2acc from cvs. It will re-appear as element of LPF\_DA\_Module

### 2011-04-07 13:09 hewitson

\* @ao/elementOp.m: Bug fix: we need to call the recursive call properly.

### 2011-04-07 13:01 ingo

\* @paramValue/paramValue.m: Change the EMPTY\_\* factories is that way that they return only the empty object and not a paramValue object. We have decided that a param-object doesn't store a paramValue but the single value if the param doesn't have any options --> and an empty String, Cell, Double doesn't have any options.

#### 2011-04-07 12:55 hewitson

\* @ao/: abs.m, and.m, plus.m: These are now simiplified and use the new versions of applymethod and elementOp.

#### 2011-04-07 12:55 hewitson

\* @ao/elementOp.m: An expanded version of elementOp which takes over some more responsibilities from the calling methods.

#### 2011-04-07 12:55 hewitson

\* @ao/applymethod.m: An expanded version of apply method which takes over a lot of the responsibilities from the calling methods.

#### 2011-04-07 12:54 hewitson

- \* @ao/ao.m: 1) Default xunits are empty for loading from ascii file
  - 2) We have changed the behaviour of applymethod so this is now a static method.

#### 2011-04-07 12:53 hewitson

\* @ltpda\_uoh/ltpda\_uoh.m: Default name is empty.

#### 2011-04-07 12:52 hewitson

\* @paramValue/paramValue.m: The default data type should be cdata to match the changes in the columns for loading from ascii file.

### 2011-04-07 12:52 hewitson

\* @ltpda\_uoh/fromFile.m: Assume any file extension other than xml, mat or fil is just an ascii file.

### 2011-04-07 12:51 hewitson

\* @ao/fromDatafile.m: We only need to check for even columns if we have more than one column. If we have one column and fs then the type must be set to cdata otherwise we throw an error.

### 2011-04-07 12:27 hewitson

\* @param/setDefaultOption.m: Bug fix. If the value is not a paramValue we just go ahead and set it rather than warning and doing nothing.

### 2011-04-07 11:55 hewitson

\* @param/setDefaultOption.m: Bug fix. The second error message is only correct if the option is a paramValue.

#### 2011-04-07 09:53 hewitson

\* +utils/@helper/callerIsMethod.m: Make callerIsMethod aware of built-in models. If the stack contains fromModel we are being called from inside a method which is being called (perhaps deeply) inside fromModel, so we can have callerIsMethod = true since we don't need to add history inside building of models. 2011-04-07 09:11 mauro

\* @smodel/setYunits.m: Cosmetics

2011-04-07 09:09 mauro

\* @ltpda\_uo/fromModel.m: Tuned a bit the error message choice.
Matlab is not very generous in the variety of error identifier
...

2011-04-06 16:10 mauro

\* @ltpda\_uo/fromModel.m: Comments clarified

2011-04-06 16:07 mauro

\* @ltpda\_uo/fromModel.m: Removed support for things like: s=ssm('built-in', 25); That gives a big speed-up because we do not need to call <class>.getBuiltInModels any more.

2011-04-06 16:06 mauro

\* @ltpda uo/getBuiltInModels.m: Cosmetics

2011-04-06 15:16 mauro

\* @plist/append.m: That had a huge impact on my computer (If I did not break things)

2011-04-06 14:51 mauro

\* @ltpda\_uo/fromModel.m: More detailed error message

2011-04-06 13:20 hewitson

\* @ao/fromParameter.m: The constructor for the new ao 'from parameter' constructor.

2011-04-06 13:20 hewitson

\* @ao/ao.m: Added a new constructor from parameter.

Suppose we have a plist containing a key 'a', then we can make a cdata AO with the value of 'a'. Other properties are also used in constructing the AO (at the moment only properties 'unit' and 'units' are supported). All properties are added to the procinfo.

a = ao(plist('parameter', pl, 'key', 'a'))

2011-04-06 13:17 hewitson

\* @plist/applyDefaults.m: Now we implement the correct logic for all LTPDA methods.

User input values should override default values. Default values should not be used to fill in the gaps in the user input. This means that if default parameters have other properties (units, descriptions, etc), then they will be preserved through this process.

2011-04-06 13:16 hewitson

\* @plist/getIndexForKey.m: Bug fix: the method should return the indices, not a full set of logicals. Maybe this breaks other things?

2011-04-06 13:15 hewitson

\* @plist/getKeys.m: Bug fix for the case of empty plist.

2011-04-06 10:31 hewitson

\* +utils/@jmysql/insertObjMetadataV1.m: Introduced a nasty bug in the submission process when trying to handle long descriptions. I set the wrong data to the wrong field.

2011-04-06 00:04 mauro

\* +utils/@helper/setoutputs.m: Bug fix: supporting also the case of 0 outputs (modifier call)

2011-04-06 00:01 mauro

\* @ao/: plus.m, setXunits.m, setYunits.m: Use
 utils.helper.setoutputs

2011-04-05 14:57 mauro

\* @ao/xspec.m: Do not modify the user—input plist when adding the 'scale' parameter, necessary for the call to ao/welch

2011-04-05 14:51 mauro

\* +utils/@helper/mat2str.m: Go back to 17 figures because this is impacting also on UTPs. We should find some other way to make 'nicer' the display of 1e-12 et al

2011-04-05 12:55 mauro

\* +utils/@helper/mat2str.m: This gives better results on displaying small (micro, nano, atto, femto) units. Test: u = unit('pm')

2011-04-05 12:53 mauro

\* +utils/@helper/objdisp.m: Cosmetics

2011-04-05 12:48 mauro

\* +utils/@helper/objdisp.m: I suspect this was a bug

2011-04-05 12:47 mauro

\* +utils/@helper/objdisp.m: Change to switch/case syntax to improve code readability

2011-04-05 12:47 mauro

\* @unit/display.m: Cosmetics

2011-04-05 10:15 mauro

\* @ao/lpsd.m: Code harmonization

2011-04-05 10:14 mauro

\* @ao/cpsd.m: Minor changes in comments

2011-04-05 10:14 mauro

\* @ao/lcpsd.m: Code harmonization Minor changes in comments

2011-04-05 10:13 mauro

\* @ao/: ltfe.m, tfe.m: Uses the applyDefaults method to check/combine user-input plist and default plist Help updated Code harmonization

2011-04-05 10:12 mauro

\* @ao/: lxspec.m, xspec.m: Handling also 'split' option to select time ranges

2011-04-05 10:12 mauro

\* @ao/: cohere.m, lcohere.m: Uses the new applyDefaults method. Help updated Code harmonization

2011-04-05 07:40 mauro

\* @ao/cpsd.m: Bug fixed

2011-04-05 07:38 mauro

\* @ao/: cpsd.m, lcpsd.m: Uses the new applyDefaults method.

2011-04-05 07:36 mauro

\* @ao/psd.m: Minor

2011-04-05 07:36 mauro

\* @ao/lpsd.m: Bug fixed

2011-04-05 07:27 mauro

\* @ao/lpsd.m: Set the outputs with the new utility

2011-04-05 07:26 mauro

\* @ao/psd.m: Added 'split' option to select time ranges

2011-04-05 07:25 mauro

\* @ao/lpsd.m: Uses the new applyDefaults method. Added 'split'
option to select time ranges

2011-04-05 07:08 mauro

\* @plist/plist.m: Added a 'split' option, identical to 'times'

2011-04-04 16:19 luigi

\* @pzmodel/fromParfrac.m: this fix MANTIS bug 409

2011-04-04 15:45 hewitson

\* @ao/: abs.m, psd.m: Example usage of the new applyDefaults method.

2011-04-04 15:44 hewitson

\* @plist/applyDefaults.m: Avoid using a loop and make a single call to ismember.

2011-04-04 15:22 hewitson

\* @plist/: applyDefaults.m, plist.m: A first version of a hidden method for developer use. The method takes a default plist and then the user inputs and produces a combined plist. Warnings are issued for any user input key which is not in the default plist. This avoids the potentially nasty situation where a user mistypes and key name and then doesn't realise that their input was not applied.

Usage:

pl = applyDefaults(getDefaultPlist, varargin{:})

2011-04-04 14:59 hewitson

\* @ao/iplot.m: Bug fix when switching off individual legend entries.

2011-04-04 13:56 hewitson

\* @ao/table.m: Added a comment in the help that xyzdata is not

supported and also fixed a typo in the error message.

#### 2011-04-04 13:55 hewitson

\* @ao/display.m: In the case of xyzdata, the x and y fields need not be the same. This was breaking display. I've added an exception for xyzdata, though this is not such an elegant solution since it tightly couples the ao and data classes. Still, we do that a lot anyway.....

#### 2011-04-04 13:45 hewitson

\* @ao/iplot.m: Bug fix in handling time-series with units that are not 's'.

#### 2011-04-04 13:37 hewitson

\* @mfir/mkbandpass.m, @mfir/mkbandreject.m, @mfir/mkhighpass.m, @mfir/mklowpass.m, @miir/mkbandpass.m, @miir/mkbandreject.m, @miir/mkhighpass.m, @miir/mklowpass.m: Use the new utility for checking the options. This answers MANTIS issue 333.

#### 2011-04-04 13:36 hewitson

\* +utils/@helper/: checkFilterOptions.m, helper.m: A new utility
for checking the options for filter constructors so that we get
consistent error messages.

#### 2011-04-04 13:29 hewitson

\* @miir/mklowpass.m: An equals sign was missing.

#### 2011-04-04 13:21 hewitson

\* @ao/iplot.m: Proper handling of mixed x-axis units. This answers to MANTIS issue 403.

#### 2011-04-04 12:49 hewitson

\* @ao/iplot.m: Set the Xunits property to OPTIONAL so that we can do things like

```
plist('Xunits', {'all', 'h'})
```

on the GUI.

This answers to MANTIS issue 496.

### 2011-04-04 09:49 hewitson

\* @ao/detrend.m: Added some discussion on the two different algorithms which are used, and their interpretation. This 'fixes' MANTIS issue 133.

### 2011-04-04 09:20 hewitson

\* @parfrac/parfrac.m: Add two argument constructor

p = parfrac(res, poles)

This uses the default value of 0 for the direct term.

#### 2011-04-04 09:17 hewitson

\* @parfrac/parfrac.m: We can't allow an empty direct term. It must be a number. Many other functions are depending on this not being empty (for example, pzmodel/fromParfrac).

#### 2011-04-01 13:01 hewitson

\* @ao/resample.m: Added an error if the input filter is not an MFIR filter. This fixes bug 435.

## 2011-04-01 11:25 hewitson

\* @ao/ao.m: Change the default columns for loading from ASCII files. The only thing we can assume is that the data file has at least one column (otherwise, why would the user be trying to load it). This partly answers MANTIS issue 502.

#### 2011-04-01 11:18 hewitson

\* @ao/iplot.m: The use of xmaths, ymaths, and zmaths parameters is now deprecated. It is too difficult to handle the units properly. This answers to MANTIS bug 509.

### 2011-04-01 11:05 hewitson

\* @ao/spectrogram.m: Set a more sensible default for NFFT to be length(data)/2. Before it was set to be the sample rate, but if the sample rate is 1, then things go bananas. This resolved MANTIS bug 314.

#### 2011-04-01 10:58 hewitson

\* @pzmodel/pzmodel.m: Added some more text to the help to explain the syntax of entering poles and zeros.

### 2011-04-01 10:49 hewitson

 $\ast$  @ltpda\_uo/ltpda\_uo.m: Set the default name of objects to ''. This responds to bug 479.

### 2011-04-01 10:44 hewitson

\* @ao/ao.m, @cdata/cdata.m: Allow constructing AOs with matrix of logicals:

a = ao(true)

This fixes MANTIS bug 527.

### 2011-04-01 10:36 hewitson

\* +utils/@jmysql/connect.m: If more than one connection matching the user's request is found, then ask the user to choose which one to use. This fixes MANTIS bug 478.

### 2011-04-01 10:35 hewitson

\* +utils/@jmysql/: insertObjMetadata.m, insertObjMetadataV1.m, updateObjMetadata.m, updateObjMetadataV1.m: Check the length of the object description to make sure it fits in the mysql field. This fixes MANTIS bug 481.

#### 2011-04-01 09:56 hewitson

\* @ao/psd.m: Uses the new utility for setting the outputs.

### 2011-04-01 09:52 hewitson

\* +utils/@helper/: helper.m, setoutputs.m: A new method to set the outputs for LTPDA methods.

### 2011-04-01 09:31 hewitson

\* @smodel/elementOp.m: Fix for MANTIS bug 511. If one of the models involved in the operation has an empty xvals or xvar we take the xvar or xvals from the other model.

### 2011-03-31 20:08 ingo

\* @parfrac/parfrac.m: comment out just for the test the part in the MATLAB setter-rule that 'dir' throws an error if it is empty. We

have to discuss about this.

2011-03-31 20:06 ingo

\* +utils/@helper/getClassFromStruct.m: bug fix for the case that we made the 'version' property as hidden because properties(class) will return only all public not-hidden properties. But struct(obj) creates also a field from the hidden property.

2011-03-31 19:12 ingo

\* @ltpda\_obj/ltpda\_obj.m: bug fix: Because of playing with dynamic properties I have derived the ltpda\_obj class from the 'dynamicprops' class but this was a mistake to commit. -> change back to 'handle'-class.

2011-03-31 19:08 ingo

\* @ltpda\_uoh/setProcinfo.m: It is necessary to copy the input-plist before we assign the value to the property-.

2011-03-31 19:06 ingo

\* @smodel/smodel.m: Update MATLAB setter rules for the properties.

2011-03-31 19:05 ingo

\* @smodel/: setTrans.m, setXunits.m, setXvals.m, setXvar.m: Update
setter methods

2011-03-31 19:05 ingo

\* @smodel/: attachToDom.m, fromDom.m: Adapt the XML-methods to the new property rules.

2011-03-31 19:04 ingo

\* @smodel/eval.m: bug fix:

2011-03-31 19:04 ingo

\* @unit/unit.m: Add additional constructor: unit( [unit('Hz')
 unit('s')], 'Hz' ) <- first or second input are multiple
 unit-objects.</pre>

2011-03-31 17:38 luigi

\* +utils/@math/: KSpValue.m, SKcriticalvalues.m, kstest.m: bug fixed n was wrongly calculated in the test against a theoretical distribution

2011-03-31 16:55 mauro

\* @ao/zunits.m: Added an ao method to set zunits

2011-03-31 16:51 hewitson

\* @LTPDAworkbench/cb\_rebuildLibrary.m: We need to pass in the workbench since rebuildLibrary is static.

wb.rebuildLibrary

is not the same as

LTPDAworkbench.rebuildLibrary(wb)

2011-03-31 15:59 luigi

\* @matrix/linfitsvd.m: changed plist to support new common plist for multichannel fitters

2011-03-31 15:58 luigi

\* @plist/plist.m: started a common plist for multichannel fitters plist name is MCH\_FIT\_PLIST

#### 2011-03-31 14:30 mauro

\* @ao/: xunits.m, yunits.m: Switch to full support for multiple inputs. A side effect is that we cannot output [] for a non-existing property, so we use unit()

#### 2011-03-31 10:00 hewitson

\* +utils/@helper/callerIsMethod.m: We need another exception otherwise history tracking in the workbench doesn't work.

### 2011-03-31 10:00 hewitson

\* @LTPDAworkbench/reset.m: We need to clear the workbench ID structure now that we support multiple workbenches.

#### 2011-03-31 09:59 hewitson

\* @LTPDAworkbench/run.m: Return the workbench ID from run so we can clear the variables in a test environment.

#### 2011-03-30 18:05 hewitson

\* @ao/melementOp.m: This is the desired change to rule 10 of matrix operations. The inner operation is now (ao.\*ao + ao.\*ao + ...)

#### 2011-03-30 18:04 hewitson

\* @LTPDAworkbench/lib.mat: Updated library.

#### 2011-03-30 16:25 hewitson

 $\ast$  @pzmodel/pzmodel.m: The delay parameter was missing from the relevant default plist. This fixes MANTIS bug 421.

### 2011-03-30 15:27 mauro

\* @ao/: cohere.m, cpsd.m, lcohere.m, lcpsd.m, lpsd.m, ltfe.m,
psd.m, tfe.m: Minor changes

### 2011-03-30 15:17 mauro

\* @fsdata/fsdata.m, @tsdata/tsdata.m, @xydata/xydata.m, @xyzdata/xyzdata.m, @pest/pest.m: Removed list of public methods A little bit of code harmonization

## 2011-03-30 15:15 mauro

\* @data2D/data2D.m, @data3D/data3D.m: Removed list of public methods

## 2011-03-30 10:16 hewitson

\* @parfrac/parfrac.m: Fix for MANTIS bug 327. An error is now thrown if the direct term is set empty by the user.

### 2011-03-30 09:59 hewitson

\* @LTPDAworkbench/cb\_executePlan.m: If execution of one pipeline in the plan fails, then the user is prompted to continue or to abort execution of the plan. This is in response to MANTIS bug 491.

### 2011-03-29 17:36 luigi

\* +utils/@math/: computeDftPeriodogram.m, dft.m: some restyle to better match theory

## 2011-03-29 15:40 hewitson

```
* @ao/cohere.m, @ao/complex.m, @ao/compute.m, @ao/convert.m,
  @ao/ctranspose.m, @ao/delay.m, @ao/display.m, @ao/elementOp.m,
@ao/fft.m, @ao/fftfilt.m, @ao/getdof.m, @ao/iplot.m, @ao/join.m,
  @ao/lisovfit.m, @ao/lscov.m, @ao/ltfe.m, @ao/mcmc.m,
  @ao/mdc1_ifo2acc_fd_utn.m, @ao/mdc1_ifo2acc_inloop.m,
  @ao/mpower.m, @ao/polyfit.m, @ao/polynomfit.m, @ao/rms.m,
  @ao/search.m, @ao/setY.m, @ao/smoother.m, @ao/timeaverage.m,
  @ao/xcorr.m, @ao/average.m, @ao/buildWhitener1D.m, @ao/cat.m,
  @ao/consolidate.m, @ao/conv.m, @ao/corr.m, @ao/cov.m, @ao/cpsd.m,
@ao/crbound.m, @ao/demux.m, @ao/detrend.m, @ao/diff.m,
  @ao/double.m, @ao/export.m, @ao/filtSubtract.m, @ao/find.m,
  @ao/fngen.m, @ao/gnuplot.m, @ao/integrate.m, @ao/interpmissing.m,
  @ao/linSubtract.m, @ao/lincom.m, @ao/linfit.m, @ao/md5.m,
  @ao/mdc1_cont2act_utn.m, @ao/noisegen1D.m, @ao/normdist.m,
  @ao/removeVal.m, @ao/resample.m, @ao/setDy.m, @ao/setXY.m,
  @ao/simplifyYunits.m, @ao/sineParams.m, @ao/smallvector_lincom.m,
  @ao/spectrogram.m, @ao/spsd.m, @ao/timeshift.m, @ao/upsample.m,
  @ao/validate.m, @ao/whiten2D.m, @ao/zDomainFit.m, @ao/bicohere.m,
  @ao/bilinfit.m, @ao/confint.m, @ao/delayEstimate.m,
  @ao/dropduplicates.m, @ao/dsmean.m, @ao/evaluateModel.m,
  @ao/filter.m, @ao/filtfilt.m, @ao/firwhiten.m, @ao/fixfs.m,
@ao/heterodyne.m, @ao/hist.m, @ao/ifft.m, @ao/iplotyy.m,
  @ao/lcohere.m, @ao/lcpsd.m, @ao/lpsd.m, @ao/mcmc_td.m,
  @ao/mdc1_ifo2cont_utn.m, @ao/mdc1_ifo2control.m,
  @ao/mdc1_x2acc.m, @ao/noisegen2D.m, @ao/offset.m, @ao/psd.m,
  @ao/psdconf.m, @ao/quasiSweptSine.m, @ao/rotate.m,
  @ao/sDomainFit.m, @ao/scale.m, @ao/scatterData.m, @ao/select.m,
  @ao/setFs.m, @ao/setX.m, @ao/setZ.m, @ao/sort.m, @ao/svd_fit.m,
@ao/table.m, @ao/tdfit.m, @ao/whiten1D.m, @ao/xfit.m,
  @ao/zeropad.m, @ao/bin_data.m, @ao/dft.m, @ao/downsample.m,
  @ao/interp.m, @ao/ltp_ifo2acc.m, @ao/mdc1_ifo2acc_fd.m,
  @ao/power.m, @ao/setDx.m, @ao/setT0.m, @ao/smallvectorfit.m,
  @ao/split.m, @ao/sumjoin.m, @ao/tfe.m, @ao/transpose.m, @pest/setPdf.m, @pest/setY.m,
  @LTPDARepositoryManager/copyObjects.m,
  @LTPDARepositoryManager/executeQuery.m,
  @LTPDARepositoryManager/findConnections.m,
  @LTPDARepositoryManager/getSinfo.m,
  @LTPDARepositoryManager/newConnection.m, @matrix/crb.m,
  @matrix/fftfilt.m, @matrix/getObjectAtIndex.m,
  @matrix/linearize.m, @matrix/mcmc.m, @matrix/rotate.m,
  @matrix/setObjs.m, @matrix/simplify.m, @matrix/tdfit.m,
  @pest/LTPimperf2physParams.m, @pest/combineExps.m, @pest/eval.m,
  @pest/setChain.m, @pest/setChi2.m, @pest/setCorr.m,
  @pest/setCov.m, @pest/setDof.m, @pest/setDy.m, @pest/setModels.m,
  @pest/setNames.m, @pest/setYunits.m, @pest/tdChi2.m,
+utils/@jmysql/getsinfo.m, @LTPDAworkbench/cb_executePlan.m,
  @LTPDAworkbench/runPipeline.m, @collection/addObjects.m,
  @collection/getObjectAtIndex.m, @collection/getObjectsOfClass.m,
  @collection/removeObjectAtIndex.m,
  @collection/setObjectAtIndex.m, @collection/setObjs.m,
  @history/hist2m.m, @ltpda_uo/bsubmit.m, @ltpda_uo/retrieve.m,
  @ltpda_uo/save.m, @ltpda_uo/submit.m, @ltpda_uo/update.m,
  @ltpda_uoh/index.m, @ssm/addParameters.m, @ssm/append.m,
  @ssm/assemble.m, @ssm/duplicateInput.m, @ssm/getParams.m, @ssm/modifyTimeStep.m, @ssm/optimiseForFitting.m,
  @ssm/sMinReal.m, @ssm/setBlockDescriptions.m,
  @ssm/setBlockNames.m, @ssm/setBlockProperties.m,
  @ssm/setParams.m, @ssm/setPortDescriptions.m,
  @ssm/setPortNames.m, @ssm/setPortProperties.m,
@ssm/setPortUnits.m, @ssm/simplify.m, @ssm/ssm.m,
  +utils/@mysql/getsinfo.m, @ltpda_tf/simplifyUnits.m,
  @ltpda_uoh/created.m, @ltpda_uoh/creator.m, @ltpda_uoh/rebuild.m,
  @ltpda_uoh/string.m, @ltpda_uoh/type.m, @miir/miir.m, @pzmodel/setPoles.m, @pzmodel/setZeros.m, @smodel/hessian.m,
  @smodel/simplifyUnits.m, @timespan/double.m: Moved all the
  'running %s' messages to PROC3 to be less annoying.
```

#### 2011-03-29 15:06 hewitson

\* @ltpda\_uo/submit.m: Added some notes about future use of submit and validate, just so we don't forget.

#### 2011-03-29 13:15 ingo

\* @ltpda\_obj/ltpda\_obj.m, @plist/plist.m: We have to define the removed properties as hidden constants. In case of backwards compatibility it is necessary to keep them because MATLAB will read older MAT-files as structures which we have to convert into an object if we make major change to a class. For MATLAB is a major change if we remove a proeprty.

#### 2011-03-29 10:08 hewitson

\* @ltpda\_uoh/requirements.m: A new method which lists the extension modules required to rebuild a given object or set of objects.

#### 2011-03-29 09:52 hewitson

\* @ltpda\_uoh/setName.m: Bug fixes: support the old behaviour of setting the name via the variable name

a.setName

### 2011-03-28 20:04 ingo

\* @cdata/update\_struct.m, @fsdata/update\_struct.m,
 @tsdata/update\_struct.m, @xydata/update\_struct.m,
 @xyzdata/update\_struct.m: bug fix -> see below 1.) It is
 necessary to check before if the x-, or y-units is a unit object
 or not. 2.) It is not necessary to remove fields from the
 struct.

### 2011-03-28 19:04 ingo

\* +utils/@xml/: xmlread.m, xmlwrite.m: Update the file because we have removed the 'version' property from all objects.

## 2011-03-28 19:03 ingo

\* @ltpda\_uo/: submit.m, update.m: Use the LTPDA toolbox version for the meta data 'version' instead of the object version.

## 2011-03-28 19:02 ingo

\* @ao/ao.m, @ao/attachToDom.m, @ao/fromDom.m, @ao/fromStruct.m, @cdata/attachToDom.m, @cdata/cdata.m, @cdata/fromDom.m, @cdata/fromStruct.m, @collection/attachToDom.m, @collection/collection.m, @collection/fromDom.m, @collection/fromStruct.m, @filterbank/attachToDom.m, @filterbank/filterbank.m, @filterbank/fromDom.m, @filterbank/fromStruct.m, @fsdata/attachToDom.m, @fsdata/fromDom.m, @fsdata/fromStruct.m, @fsdata/fsdata.m, @history/attachToDom.m, @history/fromDom.m, @history/fromStruct.m, @history/history.m,
@history/update\_struct.m, @ltpda\_obj/ltpda\_obj.m, @ltpda\_obj/prependVersion.m, @ltpda\_obj/setVersion.m, @matrix/attachToDom.m, @matrix/fromDom.m, @matrix/fromStruct.m, @matrix/matrix.m, @mfir/attachToDom.m, @mfir/fromDom.m, @mfir/fromStruct.m, @mfir/mfir.m, @miir/attachToDom.m, @miir/fromDom.m, @miir/fromStruct.m, @miir/miir.m,
@minfo/fromStruct.m, @minfo/getEncodedString.m, @minfo/minfo.m, @minfo/setFromEncodedInfo.m, @param/attachToDom.m, @param/fromDom.m, @param/fromStruct.m, @param/param.m,
@paramValue/fromStruct.m, @paramValue/paramValue.m, @parfrac/attachToDom.m, @parfrac/fromDom.m, @parfrac/fromStruct.m, @parfrac/parfrac.m, @pest/attachToDom.m,
@pest/fromDom.m, @pest/fromStruct.m, @pest/pest.m,

@plist/attachToDom.m, @plist/fromDom.m, @plist/fromStruct.m, @plist/plist.m, @provenance/fromStruct.m, @provenance/getEncodedString.m, @provenance/provenance.m, @provenance/setFromEncodedInfo.m, @provenance/update\_struct.m, @pz/attachToDom.m, @pz/fromDom.m, @pz/fromStruct.m, @pz/pz.m,
@pzmodel/attachToDom.m, @pzmodel/fromDom.m, @pzmodel/fromStruct.m, @pzmodel/pzmodel.m, @rational/attachToDom.m, @rational/fromDom.m,
@rational/fromStruct.m, @rational/rational.m, @smodel/attachToDom.m, @smodel/fromDom.m, @smodel/fromStruct.m, @smodel/smodel.m, @specwin/attachToDom.m, @specwin/fromDom.m, @specwin/fromStruct.m, @specwin/specwin.m, @ssm/attachToDom.m, @ssm/fromDom.m, @ssm/fromStruct.m, @ssm/ssm.m, @ssmblock/attachToDom.m, @ssmblock/fromDom.m, @ssmblock/fromStruct.m, @ssmblock/ssmblock.m, @ssmport/attachToDom.m, @ssmport/fromDom.m, @ssmport/fromStruct.m, @ssmport/ssmport.m, @stattest/attachToDom.m, @stattest/fromDom.m, @stattest/stattest.m, @time/attachToDom.m, @time/fromDom.m, @time/fromStruct.m, @time/time.m, @timespan/attachToDom.m, @timespan/fromDom.m, @timespan/fromStruct.m, @timespan/timespan.m, @tsdata/attachToDom.m, @tsdata/fromDom.m, @tsdata/fromStruct.m, @tsdata/tsdata.m, @unit/attachToDom.m, @unit/fromDom.m, @unit/fromStruct.m, @unit/unit.m, @xydata/attachToDom.m, @xydata/fromDom.m, @xydata/fromStruct.m, @xydata/xydata.m, @xyzdata/attachToDom.m, @xyzdata/fromDom.m, @xyzdata/fromStruct.m, @xyzdata/xyzdata.m: remove the property version' from the constructors and update all methods which access this removed property.

#### 2011-03-28 18:37 luigi

\* +utils/@math/: computeDftPeriodogram.m, dft.m, freqCorr.m,
math.m, overlapCorr.m, welchdft.m: a set of utils - calculate dft
at a given freq - compute periodogram with dft - welch with dft calculate correlation between frequency bins because of the
window - calculate total covariance contribution because of
segment overlapping

## 2011-03-28 14:45 hewitson

\* @plist/char.m, @plist/combine.m, @plist/display.m, @plist/eq.m, @plist/find.m, @plist/getIndexForKey.m, @plist/getKeys.m, @plist/getParamValueForParam.m, @plist/merge.m, @plist/pset.m, @plist/removeKeys.m, @plist/setDescription.m, @plist/setDescriptionForParam.m, @plist/setMdlfile.m, @plist/setName.m, @plist/setSelectionForParam.m, @plist/shouldIgnore.m, @plist/subset.m, @ao/complex.m, @ao/convert.m, @ao/det.m, @ao/display.m, @ao/fft.m, @ao/fs.m, @ao/getdof.m, @ao/iplot.m, @ao/join.m, @ao/lscov.m, @ao/lt.m, @ao/ltfe.m, @ao/mdc1\_ifo2acc\_inloop.m, @ao/minus.m, @ao/sign.m, @ao/smoother.m, @ao/var.m, @ao/xcorr.m, @plist/append.m,
@plist/getDescriptionForParam.m, @plist/getOptionsForParam.m, @plist/getSelectionForParam.m, @plist/getSetRandState.m, @plist/isparam.m, @plist/mfind.m, @plist/nparams.m, @plist/parse.m, @plist/plist2cmds.m, @plist/remove.m,
@plist/setDefaultForParam.m, @plist/setOptionsForParam.m, @plist/string.m, @ao/buildWhitener1D.m, @ao/cpsd.m, @ao/crbound.m, @ao/ctranspose.m, @ao/demux.m, @ao/detrend.m, @ao/dopplercorr.m, @ao/dz.m, @ao/fromProcinfo.m, @ao/ge.m, @ao/hist\_gauss.m, @ao/intersect.m, @ao/inv.m, @ao/lincom.m,
@ao/linfit.m, @ao/lisovfit.m, @ao/mdc1\_cont2act\_utn.m, @ao/median.m, @ao/mrdivide.m, @ao/mtimes.m, @ao/noisegen1D.m, @ao/optSubtraction.m, @ao/setXY.m, @ao/setY.m, @ao/simplifyYunits.m, @ao/sineParams.m, @ao/spectrogram.m, @ao/spikecleaning.m, @ao/acos.m, @ao/asin.m, @ao/bicohere.m, @ao/diag.m, @ao/dropduplicates.m, @ao/dsmean.m, @ao/filtfilt.m, @ao/firwhiten.m, @ao/fixfs.m, @ao/generateConstructorPlist.m, @ao/lcohere.m, @ao/lcpsd.m, @ao/len.m, @ao/linSubtract.m, @ao/ln.m, @ao/log10.m, @ao/mcmc\_td.m, @ao/mdc1\_ifo2cont\_utn.m, @ao/mdc1\_x2acc.m, @ao/min.m, @ao/plot.m, @ao/quasiSweptSine.m, @ao/real.m, @ao/scatterData.m, @ao/setFs.m, @ao/setX.m,

```
@ao/setZ.m, @ao/svd_fit.m, @ao/tdfit.m, @ao/upsample.m, @ao/y.m,
@ao/yunits.m, @ao/z.m, @ao/and.m, @ao/angle.m, @ao/atan2.m,
@ao/bin_data.m, @ao/char.m, @ao/cohere.m, @ao/compute.m,
@ao/cos.m, @ao/dft.m, @ao/downsample.m, @ao/exp.m,
@ao/gapfillingoptim.m, @ao/imag.m, @ao/linedetect.m,
@ao/linlsqsvd.m, @ao/mcmc.m, @ao/mdc1_ifo2acc_fd_utn.m,
@ao/mpower.m, @ao/or.m, @ao/phase.m, @ao/polynomfit.m,
@ao/power.m, @ao/psdconf.m, @ao/search.m, @ao/setDx.m,
@ao/setT0.m, @ao/setXunits.m, @ao/smallvectorfit.m, @ao/split.m,
@ao/sqrt.m, @ao/std.m, @ao/sum.m, @ao/sumjoin.m, @ao/tan.m, @ao/transpose.m, @ao/xfit.m, @ao/zeropad.m, @ao/atan.m,
@ao/average.m, @ao/cat.m, @ao/conj.m, @ao/conv.m, @ao/corr.m,
@ao/cov.m, @ao/delay.m, @ao/double.m, @ao/fftfilt.m,
@ao/filtSubtract.m, @ao/fngen.m, @ao/gnuplot.m, @ao/hypot.m,
@ao/integrate.m, @ao/interpmissing.m, @ao/normdist.m, @ao/plus.m,
@ao/polyfit.m, @ao/resample.m, @ao/rms.m, @ao/round.m,
@ao/spsd.m, @ao/svd.m, @ao/timeaverage.m, @ao/times.m,
@ao/unwrap.m, @ao/validate.m, @ao/whiten2D.m, @ao/zDomainFit.m,
@ao/abs.m, @ao/confint.m, @ao/consolidate.m, @ao/diff.m,
@ao/dy.m, @ao/eig.m, @ao/export.m, @ao/find.m, @ao/gapfilling.m,
@ao/ifft.m, @ao/iplotyy.m, @ao/log.m, @ao/md5.m,
@ao/mdc1_ifo2control.m, @ao/mean.m, @ao/mode.m, @ao/nsecs.m,
@ao/offset.m, @ao/psd.m, @ao/rdivide.m, @ao/removeVal.m,
@ao/rotate.m, @ao/sDomainFit.m, @ao/scale.m, @ao/setDy.m,
@ao/setYunits.m, @ao/smallvector_lincom.m, @ao/sort.m, @ao/t0.m,
@ao/timeshift.m, @ao/whiten1D.m, @ao/xunits.m, @ao/bilinfit.m,
@ao/delayEstimate.m, @ao/dx.m, @ao/eqmotion.m,
@ao/evaluateModel.m, @ao/filter.m, @ao/gt.m, @ao/heterodyne.m,
@ao/hist.m, @ao/interp.m, @ao/le.m, @ao/lpsd.m,
@ao/ltp_ifo2acc.m, @ao/max.m, @ao/mdc1_ifo2acc_fd.m,
@ao/noisegen2D.m, @ao/norm.m, @ao/select.m, @ao/sin.m, @ao/table.m, @ao/tfe.m, @ao/uminus.m, @ao/x.m, @pest/setPdf.m,
@pest/setY.m, @matrix/conj.m, @matrix/crb.m,
@matrix/ctranspose.m, @matrix/display.m,
@matrix/generateConstructorPlist.m, @matrix/inv.m,
@matrix/linfitsvd.m, @matrix/linlsqsvd.m, @matrix/mchNoisegen.m,
@matrix/mcmc.m, @matrix/ncols.m, @matrix/plus.m,
@matrix/rdivide.m, @matrix/rotate.m, @matrix/setObjs.m,
@matrix/split.m, @matrix/tdfit.m, @pest/LTPimperf2physParams.m,
@pest/char.m, @pest/combineExps.m, @pest/display.m, @pest/eval.m,
@pest/find.m, @pest/generateConstructorPlist.m, @pest/setChain.m,
@pest/setChi2.m, @pest/setCorr.m, @pest/setCov.m, @pest/setDof.m,
@pest/setDy.m, @pest/setDyForParameter.m, @pest/setModels.m,
@pest/setNames.m, @pest/setYforParameter.m, @pest/setYunits.m,
@pest/setYunitsForParameter.m, @pest/tdChi2.m, @plotter/plot.m,
@matrix/char.m, @matrix/det.m, @matrix/fft.m, @matrix/fftfilt.m,
@matrix/filter.m, @matrix/getObjectAtIndex.m,
@matrix/linearize.m, @matrix/mchNoisegenFilter.m,
@matrix/minus.m, @matrix/mtimes.m, @matrix/nrows.m,
@matrix/osize.m, @matrix/simplify.m, @matrix/times.m,
@matrix/transpose.m, @minfo/minfo.m, @smodel/char.m,
@smodel/conj.m, @smodel/det.m, @smodel/display.m, @smodel/eval.m,
@smodel/fourier.m, @smodel/hessian.m, @smodel/ifourier.m,
@smodel/ilaplace.m, @smodel/iztrans.m, @smodel/laplace.m,
@smodel/linearize.m, @smodel/mrdivide.m, @smodel/op.m,
@smodel/rdivide.m, @smodel/setAliasNames.m, @smodel/setAliasValues.m, @smodel/setTrans.m,
@smodel/setXunits.m, @smodel/setXvar.m, @smodel/setYunits.m,
@smodel/subs.m, @smodel/sum.m, @smodel/ztrans.m,
@collection/addObjects.m, @collection/char.m,
@collection/display.m, @collection/generateConstructorPlist.m,
@collection/getObjectAtIndex.m, @collection/getObjectsOfClass.m,
@collection/nobjs.m, @collection/removeObjectAtIndex.m,
@collection/setObjectAtIndex.m, @collection/setObjs.m,
@smodel/assignalias.m, @smodel/convol_integral.m, @smodel/diff.m,
@smodel/double.m, @smodel/fitfunc.m, @smodel/generateConstructorPlist.m, @smodel/inv.m,
@smodel/minus.m, @smodel/mtimes.m, @smodel/plus.m,
@smodel/setParams.m, @smodel/setValues.m, @smodel/setXvals.m,
@smodel/simplify.m, @smodel/simplifyUnits.m, @smodel/times.m,
@ssm/displayProperties.m, @ssm/dotview.m, @ssm/setBlockNames.m,
@stattest/char.m, @stattest/display.m,
```

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@stattest/generateConstructorPlist.m, @stattest/setData.m,
@ssm/CPSD.m, @ssm/PSD.m, @ssm/append.m, @ssm/assemble.m,
@ssm/bode.m, @ssm/bodecst.m, @ssm/char.m, @ssm/display.m,
@ssm/double.m, @ssm/duplicateInput.m, @ssm/findParameters.m,
@ssm/generateConstructorPlist.m, @ssm/getParameters.m,
@ssm/getParams.m, @ssm/isStable.m, @ssm/kalman.m,
@ssm/keepParameters.m, @ssm/modifyTimeStep.m,
@ssm/noiseSpectrum.m, @ssm/optimiseForFitting.m,
@ssm/parameterDiff.m, @ssm/reorganize.m, @ssm/resp.m,
@ssm/respcst.m, @ssm/sMinReal.m, @ssm/setBlockDescriptions.m,
@ssm/setBlockProperties.m, @ssm/setParameters.m,
@ssm/setParams.m, @ssm/setPortDescriptions.m,
@ssm/setPortNames.m, @ssm/setPortProperties.m,
@ssm/setPortUnits.m, @ssm/settlingTime.m, @ssm/simplify.m,
@ssm/simulate.m, @ssm/ssm2dot.m, @ssm/ssm2miir.m,
@ssm/ssm2pzmodel.m, @ssm/ssm2rational.m, @ssm/steadyState.m,
@ssm/subsParameters.m, @ssm/addParameters.m, @ssm/ssm2ss.m,
@timespan/char.m, @timespan/generateConstructorPlist.m,
@LTPDARepositoryManager/addConnection.m,
@LTPDARepositoryManager/copyObjects.m,
@LTPDARepositoryManager/display.m,
@LTPDARepositoryManager/executeQuery.m,
@LTPDARepositoryManager/findConnections.m,
@LTPDARepositoryManager/getConnection.m, @LTPDARepositoryManager/listConnections.m,
@LTPDARepositoryManager/showGui.m, @history/update_struct.m,
@mfir/char.m, @mfir/display.m, @mfir/generateConstructorPlist.m,
@mfir/redesign.m, @mfir/setGd.m, @mfir/update_struct.m,
@parfrac/char.m, @parfrac/display.m,
@parfrac/generateConstructorPlist.m, @parfrac/getlowerFreq.m,
@parfrac/getupperFreq.m, @rational/char.m, @rational/display.m,
@rational/generateConstructorPlist.m, @rational/getlowerFreq.m,
@rational/getupperFreq.m, @timespan/display.m,
@timespan/double.m, @timespan/setEndT.m, @timespan/setStartT.m,
@timespan/update_struct.m, +utils/@helper/dunzip.m,
+utils/@helper/dzip.m, +utils/@helper/generic_getInfo.m,
+utils/@helper/plot_gauss_hist.m,
@LTPDARepositoryManager/getSinfo.m,
@LTPDARepositoryManager/newConnection.m,
@LTPDARepositoryManager/updatePrefs.m, @ltpda_uo/bsubmit.m,
@ltpda_uo/retrieve.m, @ltpda_uo/save.m, @ltpda_uo/submit.m,
@ltpda_uo/update.m, @ltpda_uoh/setName.m,
@ltpda_uoh/setProcinfo.m, @ltpda_uoh/type.m, @pzmodel/char.m, @pzmodel/display.m, @pzmodel/fngen.m,
@pzmodel/generateConstructorPlist.m, @pzmodel/getlowerFreq.m,
@pzmodel/getupperFreq.m, @pzmodel/rdivide.m, @pzmodel/setDelay.m,
@pzmodel/setGain.m, @pzmodel/setPoles.m, @pzmodel/setZeros.m,
@pzmodel/simplify.m, @pzmodel/times.m, @pzmodel/tomfir.m,
@pzmodel/tomiir.m, @pzmodel/update_struct.m,
@aoplotter/singlePlots.m, @filterbank/addFilters.m,
@filterbank/char.m, @filterbank/display.m,
@filterbank/generateConstructorPlist.m, @filterbank/setIunits.m,
@filterbank/setOunits.m, @ltpda_filter/impresp.m,
@ltpda_filter/setHistout.m, @ltpda_obj/eq.m, @ltpda_obj/get.m,
@ltpda_obj/isprop.m, @ltpda_obj/ne.m, @ltpda_tf/resp.m,
@ltpda_tf/setIunits.m, @ltpda_tf/setOunits.m,
@ltpda_tf/simplifyUnits.m, @ltpda_uoh/created.m,
@ltpda_uoh/creator.m, @ltpda_uoh/csvexport.m, @ltpda_uoh/index.m,
@ltpda_uoh/rebuild.m, @ltpda_uoh/report.m,
@ltpda_uoh/setDescription.m, @ltpda_uoh/setMdlfile.m,
@ltpda_uoh/setPlotinfo.m, @ltpda_uoh/string.m, @ltpda_uoh/viewHistory.m, @miir/char.m, @miir/display.m, @miir/generateConstructorPlist.m, @miir/redesign.m, @miir/setB.m,
@miir/setHistin.m, @miir/update_struct.m, @unit/atan2.m,
+utils/@models/getInfo.m, @ltpda_filter/setA.m: Set the mpackage
field to 'ltpda' for all ltpda methods.
```

## 2011-03-28 13:27 hewitson

\* +utils/@modules/: moduleInfo.m, modules.m: a utility to readout the information in a moduleinfo.xml file.

#### 2011-03-28 13:26 hewitson

\* +utils/@modules/buildModule.m: buildModule now writes a small xml
file in the new module which contains the module name and
version.

#### 2011-03-26 19:30 hewitson

\* @ao/iplot.m: limit the number of generated ticks. If we have more than 10 decades on the plot, then let MATLAB choose the ticks. In my experience more than 10 decades don't fit and just make a mess. To be discussed.

#### 2011-03-25 16:35 mauro

\* @ao/: setDx.m, setDy.m, setFs.m, setT0.m, setX.m, setXY.m, setXunits.m, setY.m, setZ.m, setYunits.m: Cosmetics

#### 2011-03-25 16:33 mauro

\* @data2D/data2D.m, @data3D/data3D.m, @ltpda\_data/ltpda\_data.m:
Help about declaration of preperties now matches better the code

#### 2011-03-25 16:29 mauro

\* @cdata/cdata.m, @fsdata/fsdata.m, @tsdata/tsdata.m, @xydata/xydata.m, @xyzdata/xyzdata.m: Make explicit that the properties are public. I know. This is being pedantic.

#### 2011-03-25 16:14 mauro

\* +utils/@helper/installExtensionsForDir.m: Use the helpers to remove 'CVS' and '.svn' folders from Matlab path, which might become very long if the added modules are under version control

#### 2011-03-25 16:14 hewitson

\* @ao/ao.m: Added another convenience constructor for a sine wave. Also moved the help text in to the correct location so that

>> help ao.randn
>> help ao.sinewave

works

# 2011-03-25 16:13 hewitson

\* @ltpda\_uo/ltpda\_uo.m: Bug fix: setting an empty description shouldn't cause a problem. Anyway, I think we plan to remove these rules and only apply rules in the public setter methods.

### 2011-03-25 16:12 mauro

\* +utils/@helper/helper.m: Added the new static methods to remove
'CVS' and '.svn' folders from Matlab path

### 2011-03-25 16:11 mauro

\* +utils/@helper/: remove\_cvs\_from\_matlabpath.m,
remove\_svn\_from\_matlabpath.m: Date of prduction was non realistic

### 2011-03-25 16:06 mauro

\* +utils/@helper/remove\_svn\_from\_matlabpath.m: An utility function to remove .svn folders from the given path

#### 2011-03-25 16:05 mauro

\* +utils/@helper/remove\_cvs\_from\_matlabpath.m: An utility function to remove CVS folders from the given path

## 2011-03-25 16:05 hewitson

\* @pz/pz.m: Bug fix: this was breaking in the case of a complex pole with Q<0.5 being split in to two real poles.

#### 2011-03-25 16:02 mauro

\* +utils/@helper/installExtensionsForDir.m: Bug fixed in adding user-defined methods of existing LTPDA Tbx classes

#### 2011-03-25 14:27 ingo

\* @plist/: setDescription.m, setMdlfile.m: Define the methods setDescription and setMdlfile because in the PLIST class is it a special behaviour if we want to set a property with a PLIST.

### 2011-03-25 14:26 ingo

\* @ltpda\_uo/ltpda\_uo.m: Change access-level of the following
methods: setDescription -> abstract -> to make sure that the
sub-classes define this method setMdlfile -> abstract -> to make
sure that the sub-classes define this method setUUID -> hidden

### 2011-03-25 14:24 ingo

\* @ltpda\_uo/setUUID.m: Now is this method a simple and hidden method. It should only be used by developers like in addHistoryStep.

### 2011-03-25 14:23 ingo

\* @ltpda\_uo/: setDescription.m, setMdlfile.m: moved the setter-methods setDescription and setMdlfile from the ltpda\_uo class to the plist class because setting a property of a plist with a plist is a special case.

## 2011-03-25 14:21 ingo

\* @ao/setFs.m: bug fix: replicate the frequencies to the number of objects in the 'internal' case.

### 2011-03-25 11:19 mauro

\* @ltpda\_uoh/fromModel.m: Added version string in help, as for our standard

## 2011-03-24 21:18 ingo

\* @smodel/: setAliasNames.m, setAliasValues.m: Replace the 'internal'-switch argument by the new functionality utils.helper.callerIsMethod

## 2011-03-24 21:02 ingo

\* @ao/setDx.m, @ao/setDy.m, @ao/setFs.m, @ao/setT0.m, @ao/setX.m, @ao/setXY.m, @ao/setXunits.m, @ao/setY.m, @ao/setYunits.m, @ao/setZ.m, @collection/setObjectAtIndex.m, @collection/setObjs.m, @filterbank/setIunits.m, @filterbank/setOunits.m, @ltpda\_filter/setA.m, @ltpda\_filter/setHistout.m, @ltpda\_tf/setIunits.m, @ltpda\_tf/setOunits.m, @ltpda\_uo/setDescription.m, @ltpda\_uo/setMdlfile.m, @ltpda\_uo/setName.m, @ltpda\_uo/setUUID.m, @ltpda\_uoh/setDescription.m, @ltpda\_uoh/setMdlfile.m, @ltpda\_uoh/setName.m, @ltpda\_uoh/setPlotinfo.m, @ltpda\_uoh/setProperties.m, @matrix/setObjs.m, @mfir/setGd.m, @miir/setB.m, @miir/setHistin.m, @pest/genericSet.m, @pest/setChain.m, @pest/setDof.m, @pest/setDy.m, @pest/setDy.m, @pest/setDof.m, @pest/setNames.m, @pest/setPdf.m, @pest/setY.m, @pest/setModels.m, @pest/setYunits.m, @pest/setPoles.m, @pest/setPoles.m, @pzmodel/setDelay.m, @pzmodel/setPoles.m,

@pzmodel/setZeros.m, @smodel/setParams.m, @smodel/setTrans.m,
@smodel/setValues.m, @smodel/setXunits.m, @smodel/setXvals.m,
@smodel/setXvar.m, @smodel/setYunits.m, @timespan/setEndT.m,
@timespan/setStartT.m: Replace the 'internal'-switch argument by
the new functionality utils.helper.callerIsMethod

### 2011-03-24 20:59 ingo

### 2011-03-24 20:56 ingo

\* @smodel/assignalias.m, @smodel/display.m, @smodel/eval.m, @smodel/fitfunc.m, @smodel/linearize.m, +utils/@bin/fil.m, +utils/@helper/collect\_values.m, +utils/@math/loglikelihood.m, +utils/@math/loglikelihood\_matrix.m: We have changed the 'internal'-switch of the setter-methods to the utils.helper.callerIsmethod functionality. So it is necessary in the usage of the setter-methods to remove the 'internal' argument.

## 2011-03-24 20:55 ingo

\* @plist/plist.m: Add new prototype 'processSetterValues' which is a helper function for setter-methods.

## 2011-03-24 20:55 ingo

\* @plist/processSetterValues.m: new helper function for setter-methods

### 2011-03-24 20:54 ingo

\* @pest/: eval.m, find.m: [no log message]

### 2011-03-24 20:53 ingo

\* @ltpda\_uoh/addHistory.m, @matrix/fftfilt.m, @matrix/fromValues.m, @matrix/linearize.m, @matrix/linfitsvd.m, @matrix/linlsqsvd.m, @matrix/mchNoisegenFilter.m, @matrix/mcmc.m, @matrix/rotate.m, @minfo/tohtml.m, @param/fromDom.m, @plist/parse.m, @pzmodel/simplify.m: We have changed the 'internal'-switch of the setter-methods to the utils.helper.callerIsmethod functionality. So it is necessary in the usage of the setter-methods to remove the 'internal' argument.

### 2011-03-24 20:53 ingo

\* @ltpda\_uoh/testCallerIsMethod.m: This method is a static method and helps the UTP for checking the 'internal'-behaviour of a function. For example that the function doesn't add history, ...

### 2011-03-24 20:52 ingo

\* @ltpda\_uoh/ltpda\_uoh.m: Add prototype for the function: testCallerIsMethod. This method is a static method and helps the UTP for checking the 'internal'-behaviour of a function. For example that the function doesn't add history, ...

#### 2011-03-24 20:50 ingo

\* @ltpda\_uo/processSetterValues.m: new helper function for setter-methods

## 2011-03-24 20:50 ingo

\* @ltpda\_uo/retrieve.m: Add an output of an error massage.

## 2011-03-24 20:50 ingo

\* @ltpda\_uo/ltpda\_uo.m: Add new prototype 'processSetterValues' which is a helper function for setter-methods.

### 2011-03-24 20:48 ingo

\* @ltpda\_uo/copy.m: bug fix: It is necessary to copy the UUID if it
is filled.

#### 2011-03-24 20:47 ingo

\* @ao/: abs.m, ao.m, bin\_data.m, fftfilt.m, fftfilt\_core.m,
 filtSubtract.m, filter.m, fromVals.m, linlsqsvd.m, lisovfit.m,
 ltp\_ifo2acc.m, mcmc.m, mcmc\_td.m, mdc1\_cont2act\_utn.m,
 mdc1\_ifo2acc\_fd.m, mdc1\_ifo2acc\_fd\_utn.m, mdc1\_ifo2acc\_inloop.m,
 mdc1\_ifo2cont\_utn.m, mdc1\_ifo2control.m, mdc1\_x2acc.m, mean.m,
 melementOp.m, noisegen1D.m, noisegen2D.m, rotate.m, sDomainFit.m,
 tdfit.m, timeaverage.m, zDomainFit.m: [no log message]

#### 2011-03-24 20:46 ingo

\* @ssm/CPSD.m, @ssm/PSD.m, @ssm/bode.m, @ssm/bodecst.m, @ssm/kalman.m, @ssm/noiseSpectrum.m, @ssm/resp.m, @ssm/respcst.m, @ssm/simulate.m, @ltpda\_filter/impresp.m, @ltpda\_tf/resp.m: We have changed the 'internal'-switch of the setter-methods to the utils.helper.callerIsmethod functionality. So it is necessary in the usage of the setter-methods to remove the 'internal' argument.

### 2011-03-24 15:49 mauro

\* @time/strftime.m: The case of time.utc\_epoch\_milli = NaN now gives a string 'NaN'

#### 2011-03-24 10:55 mauro

\* @ssm/ssm2dot.m: Bug fix

### 2011-03-23 21:05 adrien

\* +utils/@math/pzmodel2SSMats.m, @ssm/ssmFromMiir.m,
 @ssm/ssmFromRational.m: Code adapted to transfer functions
 without any poles

### 2011-03-23 16:49 adrien

\* @ssm/modelHelper\_declareParameters.m: Dealing with the special cases 'ALL', 'NONE', the likely '' . Finally I am not adding a warning.

## 2011-03-23 16:47 adrien

\* @ssm/: kalman.m, resp.m, respcst.m: Using internal call to set the output AO YUnits.

### 2011-03-23 15:37 luigi

\* @smodel/: setAliasNames.m, setAliasValues.m, smodel.m: sestter
methos for alias

#### 2011-03-23 12:28 mauro

\* @ao/: dx.m, dz.m, x.m, z.m: Switch to full support for multiple inputs. Output is still a matrix, a column for each input. Missing field in at least one input object forces the output to empty. Use the callerIsMethod flag to speed up calls form other methods.

# 2011-03-23 12:27 mauro

\* @ao/: dy.m, y.m: Switch to full support for multiple inputs. Output is still a matrix, a column for each input. Use the callerIsMethod flag to speed up calls form other methods.

2011-03-23 11:32 mauro

\* @fsdata/fsdata.m, @tsdata/tsdata.m, @xydata/xydata.m, @xyzdata/xyzdata.m: Harmonize syntax with cdata. Same effect as previous syntax.

2011-03-23 11:31 mauro

\* @cdata/cdata.m: Bug fix: the 'version' property was settable

2011-03-23 11:24 mauro

\* @ao/ao.m: Cosmetics

2011-03-23 11:23 mauro

\* @ao/: fs.m, nsecs.m, t0.m: Switch to full support for multiple inputs. A side effect is that we cannot output [] for a non-existing property, so we tentatively use NaN

2011-03-21 16:47 mauro

\* @data3D/: getDz.m, setDz.m: Added setter and getter for dz field

2011-03-21 16:47 mauro

\* @data3D/getZ.m: Code harmonization

2011-03-21 16:47 mauro

\* @data3D/: setZ.m, setZunits.m: Help fixed

2011-03-21 15:54 mauro

\* @ltpda\_data/getDy.m, @ltpda\_data/getY.m, @data2D/getDx.m, @data2D/getX.m: Code harmonization

2011-03-21 15:54 mauro

\* @ltpda data/setDy.m, @data2D/setXunits.m: Help fixed

2011-03-21 15:53 mauro

\* @ltpda\_data/setY.m, @ltpda\_data/setYunits.m, @data2D/setDx.m, @data2D/setX.m, @data2D/setXY.m: Just cosmetics

2011-03-21 15:52 mauro

\* @cdata/getDy.m, @cdata/getY.m, @cdata/setDy.m, @cdata/setY.m, @cdata/setYunits.m, @data2D/getDy.m, @data2D/getY.m, @data2D/setDy.m, @data2D/setYunits.m: These functionalities are inherited from the ltpda data class.

2011-03-21 11:33 miquel

 $\ast$  @matrix/mcmc.m: bug fixed: changing to new file names for the simplex

2011-03-21 09:15 mauro

\* @data3D/getZ.m: Fixed typo in help

2011-03-21 09:13 mauro

\* @ao/dz.m: A missing one. Note: currently broken, still need to code data3D/getDz

2011-03-21 09:12 mauro

\* @ao/: dx.m, dy.m, x.m, y.m, z.m: The help and the UTPs say that we support single inputs only: now they are coded accordingly and we throw an error in case of multiple inputs.

#### 2011-03-21 00:15 mauro

\* @ao/: fs.m, nsecs.m, t0.m: Make sure we support single inputs only: throws an error otheriwise. Use callerIsMethod to skip collectObjects.

#### 2011-03-21 00:12 mauro

\* @ao/len.m: Properly supporting multiple inputs / multiple outputs
Use callerIsMethod to skip collectObjects

#### 2011-03-18 11:39 mauro

\* @ao/: buildWhitener1D.m, whiten1D.m: Cosmetics

#### 2011-03-17 13:53 mauro

\* @ao/: diag.m, eig.m, svd.m: Use the factory plist to build default plist UTPs updated accordingly

# 2011-03-15 18:54 congedo

\* @ao/tdfit.m: bug fixed

# 2011-03-15 18:16 luigi

\* +utils/@math/kstest.m: bug fixed

### 2011-03-15 18:16 luigi

\* +utils/@math/: cdfplot.m, ppplot.m, qqplot.m: methods updated

### 2011-03-15 17:37 luigi

\* +utils/@math/: SKcriticalvalues.m, kstest.m, math.m: cosmetics

## 2011-03-15 17:34 congedo

\* @ao/xfit.m: bug fixed

# 2011-03-15 17:24 miquel

\* @matrix/mcmc.m: bug fixed: we were applying optimisedForFitting to all cases, even when it was a matrix model

## 2011-03-15 17:22 miquel

\* +utils/@math/mhsample.m: renaming utils.math.loglikelihood

## 2011-03-15 17:19 miquel

\* +utils/@math/: loglikehood.m, loglikehood\_matrix.m,
 loglikehood\_ssm.m, loglikehood\_ssm\_td.m, loglikehood\_td.m,
 loglikelihood.m, loglikelihood\_matrix.m, loglikelihood\_ssm.m,
 loglikelihood\_ssm\_td.m, loglikelihood\_td.m, math.m: renaming
 loglikehood\* files to loglikelihood\*

### 2011-03-15 15:59 luigi

\* +utils/@math/: KSpValue.m, SKcriticalvalues.m, kstest.m, math.m: improvements and updates

## 2011-03-15 13:35 mauro

\* @cdata/applymethod.m: Added a check on the axis we are asking to operate on, and make sure we throw an error if different thatn 'y'

- 2011-03-15 13:34 mauro
  - \* @data2D/applymethod.m: Updated error message
- 2011-03-15 10:49 luigi
  - \* @matrix/linfitsvd.m: bug fixed
- 2011-03-14 17:06 mauro
  - \* @ao/welch.m: Just changing index names, and some clean-up on formatting.
- 2011-03-14 17:04 mauro
  - \* @ao/welch.m: Bug fix for the case of tfe with more than 1 window. Segment detrended data were NOT used.
- 2011-03-14 11:53 congedo
  - \* @ao/: tdfit.m, xfit.m: implemented the choice of the local M-estimate. it's more robust than chi2 in case of non-gaussian noise, glitches and outliers.
- 2011-03-14 11:46 luigi
  - \* @matrix/linfitsvd.m: come back to procinfo since chain accepts only doubles
- 2011-03-11 19:32 adrien
  - \* @ao/gapfillingoptim.m: Debug for the LL ("Z-test") fitting for the gap-filling (does not give very good results anyway)
- 2011-03-11 13:15 luigi
  - \* @matrix/linfitsvd.m: added information on fit process in chain field instead of the procinfo
- 2011-03-11 12:48 congedo
  - \* @ao/xfit.m: tracks optimization history (chain) and put it in the output pest's field 'chain'.
- 2011-03-11 11:47 luigi
  - \* @matrix/linfitsvd.m: added a parameter to input numerical derivative step for each fit parameter
- 2011-03-11 11:28 congedo
  - \* @ao/tdfit.m, @matrix/tdfit.m: updated smodel\diff step. updated ssm template generation. added new option to perform a preliminary gradient-based search.
- 2011-03-11 11:11 hewitson
  - \* @LTPDARepositoryManager/addConnection.m: The help says I can do
    conn = rm.addConnection(pl)
    - but the output was not set. I fixed this bug.
- 2011-03-11 10:28 luigi
  - \* +utils/@math/linfitsvd.m, +utils/@math/linlsqsvd.m,
    @ao/linlsqsvd.m, @matrix/linfitsvd.m, @matrix/linlsqsvd.m: Added
    the possibility to externally set a parameter controlling the
    chosen critical values for parameters estimation
- 2011-03-11 07:59 mauro

\* @ao/welchscale.m: Bug fix for the case of single window, where we have no uncertainty

#### 2011-03-10 23:41 mauro

\* @smodel/setTrans.m: Bug fixed

#### 2011-03-10 23:31 mauro

\* @smodel/diff.m: Support smodels with more than one xvar Make clear that we do not support multiple inputs

## 2011-03-10 17:55 congedo

\* +utils/@math/: chi2.m, math.m: utility for the evaluation of chi2
 (and its gradient)

#### 2011-03-10 16:24 mauro

\* @ao/elementOp.m: I am sorry, I meant plotinfo. And, since non-empty plotinfo is a plist, this is faster.

#### 2011-03-10 16:14 mauro

\* @ao/elementOp.m: An (arguable) attempt to preserve the procinfo.
- If both are non-empty, the first objects one is used - The
propagation is done only if caller is not a method (as for the
description field)

#### 2011-03-10 14:51 mauro

\* @matrix/: mchNoisegen.m, mchNoisegenFilter.m: Fixed broken help

### 2011-03-10 12:21 miquel

\* @ao/welchscale.m: corrected scaling in ASD, AS and PS errors. Now does it according to errors'propagation. I've also removed a factor ^2 multiplying 'enbw' in the errors, because I don't think it's right

## 2011-03-10 11:28 miquel

\* @matrix/crb.m: - computes Fisher matrix also for ssm models added 'diffStep' field in plist to set numerical differentiation
step

# 2011-03-10 11:26 miquel

\* @matrix/mcmc.m: corrected typo corrected error when multiple models are inputted

## 2011-03-10 10:23 hewitson

- \* @matrix/getObjectAtIndex.m: Bug fixes.
  - 1) If the user requests multiple indices, the output objects now get the correct history
  - 2) fixed help text.

### 2011-03-10 07:31 mauro

\* @smodel/: minus.m, plus.m, rdivide.m, times.m: Help updated

### 2011-03-10 07:31 mauro

\* @smodel/elementOp.m: Supporting promotion of single-valued cdata aos as the second argument Help updated

## 2011-03-10 07:05 mauro

\* @smodel/: minus.m, plus.m, rdivide.m, times.m: Adapted to comply with the new behavior of smodel/elementOp

2011-03-10 07:04 mauro

\* @smodel/elementOp.m: Bug fixed handling aliases Added callerIsMethod flag Handling multiple xvar

2011-03-10 06:56 mauro

\* @matrix/: det.m, inv.m: Bug fix in getInfo

2011-03-09 16:21 marc1

\* @ao/whiten1D.m: introducing the scalefactor as part of the procinfo if used

2011-03-09 15:48 marc1

\* @matrix/mcmc.m: typo corrected in help

2011-03-09 15:47 marc1

\* @matrix/crb.m: updated a particular case of the magnetic analysis

2011-03-09 12:40 luigi

\* +utils/@math/ecdf.m: a completely new version for the calcualtion of ecdf. Now does not refer of corresponding stat toolbox ecdf

2011-03-08 21:30 mauro

\* @smodel/convol\_integral.m: Removed dead code Added callerIsMethod flag to skip history step

2011-03-08 17:05 mauro

\* @ao/: bilinfit.m, linfit.m, polyfit.m, polynomfit.m: Cosmetics

2011-03-08 14:10 hewitson

 $\ast$  @ao/iplot.m: Bug fix: the computation of the y tick marks was broken if one of the input objects is full of zeros.

2011-03-08 14:09 hewitson

\* @ao/ao.m: Added a convenient factory constructor:

n = ao.randn(10) % cdata n = ao.randn(10,1) % tsdata (nsecs, fs)

2011-03-08 12:26 ingo

\* @ao/elementOp.m: Use the names 'matrix' and 'vector' for the variable name if a user uses directly numbers as an input. For example: c = a .\* [1:1000]

2011-03-08 12:13 ingo

\* @data2D/attachToDom.m: bug fix: remove attaching the fields 'y',
 'dy', and 'yunits' because we do this in the super class.

2011-03-08 11:41 mauro

\* @ao/curvefit.m: This method is deprecated and replaced by ao/xfit As such, it is now removed.

2011-03-08 10:38 miquel

\* @matrix/mcmc.m: fills in the dof field simplex search works with lighter version of ssm models

2011-03-07 21:54 mauro

\* @plist/plist.m: Fix in the text about 2D and 3D plists

2011-03-07 21:52 mauro

\* @matrix/inv.m: Complies with the new behavior of matrix/det

2011-03-07 21:49 mauro

\* @matrix/det.m: Now the output is not a matrix any more, but instead an object of the contained class. Help fixed Speeded up

2011-03-07 21:43 mauro

\* @smodel/double.m, @ao/linfit.m: Cosmetics

2011-03-07 18:38 congedo

\* +utils/@math/: SFtest.m, math.m: choose whether to show the plots
or not

2011-03-07 18:30 hewitson

\* @unit/unit.m: Some optimisation that I hope doesn't break anything. Can it be that we really have no unit tests for the unit class?

2011-03-07 18:29 hewitson

\* @unit/toSI.m: First attempt at a converter to base SI units.

2011-03-07 17:56 congedo

\* +utils/@math/Fpdf.m: help updated

2011-03-07 17:50 congedo

\* +utils/@math/: Ftest.m, SFtest.m, math.m: updated with more robust test

2011-03-07 11:46 luigi

\* +utils/@math/: crank.m, math.m, spcorr.m: Spearman Rank-Order Correlation Coefficient and hypothesis test

2011-03-07 10:54 mauro

\* @smodel/linearize.m: Just a change in index name

2011-03-07 10:38 mauro

\* @collection/getObjectAtIndex.m: Bug fix: this method was not adding history to the output object(s).

2011-03-07 10:37 mauro

\* @matrix/getObjectAtIndex.m: Cosmetics

2011-03-07 10:19 mauro

\* @smodel/linearize.m: Now that smodel/diff does not add history when called by a method, we need to do it at this level.

2011-03-07 10:11 mauro

\* @smodel/simplify.m: Supporting the callerIsMethod flag to skip history and name setting.

2011-03-07 10:11 mauro

\* @smodel/diff.m: Supporting the callerIsMethod flag to skip history and name setting. Sets units when appropriate.

### 2011-03-07 09:13 mauro

\* @smodel/: det.m, inv.m: Supporting the callerIsMethod flag to skip history and name setting.

#### 2011-03-07 09:05 mauro

 $\ast$  @smodel/op.m: Supporting the callerIsMethod flag to skip objects collections, history and name setting.

#### 2011-03-07 09:02 mauro

\* @smodel/: laplace.m, fourier.m, ifourier.m, ilaplace.m,
iztrans.m, ztrans.m: Cosmetics

#### 2011-03-07 07:17 mauro

\* @smodel/smodel.m: Made smodel/sop private

#### 2011-03-07 07:01 mauro

\* @smodel/: fourier.m, ifourier.m, ilaplace.m, iztrans.m, laplace.m, ztrans.m: Call smodel/sop as a modifer. Handle the callerIsMethod flag. Handle units if present.

## 2011-03-07 06:58 mauro

\* @smodel/sop.m: Implemented as a modifier. Removed collecting of objects. Supporting the callerIsMethod flag to skip history and name setting.

#### 2011-03-04 07:23 mauro

\* @pest/toA0.m: This method is deprecated and replaced by pest/find As such, it is now removed.

### 2011-03-04 07:22 mauro

\* @ao/timedomainfit.m: This method is deprecated and replaced by ao/lscov As such, it is now removed.

## 2011-03-04 07:21 mauro

\* @ao/straightLineFit.m: This method is deprecated and replaced by ao/linfit As such, it is now removed.

## 2011-03-04 07:21 mauro

\* @ao/pwelch.m: This method is deprecated and replaced by ao/psd As such, it is now removed.

### 2011-03-04 07:20 mauro

\* +utils/@helper/ltpda\_categories.m: This method is deprecated and replaced by utils.const.categories.list As such, it is now removed.

#### 2011-03-04 07:14 mauro

\* +utils/@helper/process\_smodel\_diff\_options.m: Bug fixed in storing the actually used parameters

#### 2011-03-03 20:16 adrien

\* @ao/gapfillingoptim.m: Updating the gapfilling function with three different tests (Z-tests and F-tests, on the spectrum)

### 2011-03-03 19:14 hewitson

\* +utils/@math/loglikehood\_ssm.m: Take in the A,B,C,D matrices and
use them to reset the system object before setting the

parameters. This avoids the copy. Also fixed the indentation to the one we all use (2 spaces per tab).

#### 2011-03-03 19:13 hewitson

\* +utils/@math/mhsample.m: Cache the A,B,C,D matrices and pass them in to the logliklihood routine. This allows us to avoid copying the object since we can just set the matrices each time in the loop using the new hidden setters. This, together with the optimisation of the system results in a factor of 6 speed increase on my laptop.

#### 2011-03-03 19:12 hewitson

\* @matrix/mcmc.m: Optimise the model before entering the sampling loop.

#### 2011-03-03 19:11 hewitson

\* @ssm/doSubsParameters.m: Check if we have any symbolic matrices in the system. If not, we only declare parameters as doubles. If we have, then we revert to the old system of declaring them as symbols.

## 2011-03-03 19:10 hewitson

\* @ssm/ssm.m: Declare the new setters as hidden.

#### 2011-03-03 19:10 hewitson

\* @ssm/optimiseForFitting.m: A new tool which optimises a statespace model for fitting. It ensures that any matrix that can be numeric, will be numeric. It also converts mupad symbolic matrices to string equivalents which can be evaluated in the loop.

#### 2011-03-03 19:09 hewitson

\* @ssm/: setA.m, setB.m, setC.m, setD.m: Hidden setter methods for the ssm matrices.

## 2011-03-01 12:35 ingo

\* @stattest/stattest.m: remove the methods 'addGlobalKeys' and 'removeGlobalKeys' because this class inherits this methods from the parent-class.

## 2011-02-28 19:08 ingo

\* @LTPDAworkbench/lib.mat: We have changed at least the default value for 'plotinfo' from an empty PLIST to an empty array [].

### 2011-02-28 19:04 ingo

\* @ao/ao.m, @collection/collection.m, @filterbank/filterbank.m, @ltpda\_uoh/ltpda\_uoh.m, @matrix/matrix.m, @mfir/mfir.m, @miir/miir.m, @parfrac/parfrac.m, @pest/pest.m, @pzmodel/pzmodel.m, @rational/rational.m, @smodel/smodel.m, @ssm/ssm.m, @timespan/timespan.m: move the static methods: 'addGlobalKeys' and 'removeGlobalKeys' to the super-class ltpda\_uoh. -> easier to maintain

### 2011-02-28 18:11 ingo

\* @plist/update\_struct.m: - remove the history part from the headers because we track the history with cvs

## 2011-02-28 18:10 ingo

\* @param/param.m, @plist/append.m, @plist/setDescriptionForParam.m: check before setting the 'desc' to a param-object that the value is a string. We don't have a setter rule for the 'desc' because

the rules cost too much time.

#### 2011-02-28 18:08 ingo

\* @plist/: setOptionsForParam.m, setSelectionForParam.m: — remove the history part from the headers because we track the history with cvs — correct some command description and error message.

#### 2011-02-28 18:07 ingo

\* @plist/simplify.m: add header

### 2011-02-28 18:06 ingo

\* @plist/: char.m, combine.m, display.m, find.m, getDescriptionForParam.m, getIndexForKey.m, getKeys.m, getOptionsForParam.m, getParamValueForParam.m, getSelectionForParam.m, getSetRandState.m, isparam.m, mfind.m, nparams.m, parse.m, plist2cmds.m, pset.m, remove.m, removeKeys.m, setDefaultForParam.m, setName.m, string.m, subset.m: remove the history part from the headers because we track the history with cvs.

## 2011-02-28 13:40 ingo

\* @mfir/redesign.m, @miir/redesign.m: Nothing

### 2011-02-28 13:39 ingo

\* @ltpda\_uoh/rebuild.m: Simplify the method by using history/rebuild.

### 2011-02-28 13:38 ingo

\* @ao/mode.m: - Combine the input PLIST with the default PLIST - call applymethod as a modifier - change the order of the first two inputs.

### 2011-02-28 13:35 ingo

\* @history/hist2m.m: Don't use collect\_objects because it cost too much time. Use fix number of inputs instead.

# 2011-02-28 13:34 ingo

\* @history/rebuild.m: It was a mistake to delete this method. Some methods use this method to rebuild objects which are stored as history-objects in PLISTs. For example miir/redesign.

## 2011-02-28 06:49 mauro

\* @ao/average.m: Use the lighter setters for the data class In the case of single input, just pass it out

### 2011-02-27 17:33 luigi

\* +utils/@math/qqplot.m: bug fixed in xlabel and ylabel

#### 2011-02-26 13:29 hewitson

\* @ao/abs.m: I think for abs we can just keep the errors on the original data. Discuss.

### 2011-02-25 16:49 ingo

\* @ao/: abs.m, acos.m, angle.m, asin.m, atan.m, conj.m, cos.m, det.m, diag.m, eig.m, exp.m, imag.m, inv.m, ln.m, log10.m, log.m, mean.m, median.m, norm.m, phase.m, real.m, round.m, sign.m, sin.m, sqrt.m, std.m, sum.m, svd.m, tan.m, uminus.m, unwrap.m, var.m: — Combine the input PLIST with the default PLIST — call applymethod as a modifier — change the order of the first two inputs.

- 2011-02-25 16:46 ingo
  - \* @ao/applyoperator.m: [no log message]
- 2011-02-25 16:46 ingo
  - \* @ao/: hypot.m, atan2.m, mpower.m, power.m: Use applyOperator as a modifier and change the order of the first two inputs.
- 2011-02-25 16:45 ingo
  - \* @ao/export.m: new behavior for cdata AOs. We don't generate dummy 'x' values for cdata values. Now we store only the y values. We will keep the shape of the values.
- 2011-02-25 16:41 ingo
  - \* @cdata/applymethod.m, @data2D/applymethod.m, @ao/applymethod.m: Use fix number of inputs because only ao/applymethod calls this method Don't pass a PLIST back because we want to use the default PLIST from the AO methods. Remove the default PLIST because we want to use the default PLIST from the AO methods.
- 2011-02-25 16:33 ingo
  - \* @plist/plist.m: Change the default value of the AXIS\_DATA\_3D to
    'y' (before 'z')
- 2011-02-25 11:05 congedo
  - \* +utils/@math/Fpdf.m: help corrected
- 2011-02-25 11:04 congedo
  - \* +utils/@math/: Kurt.m, Skew.m, math.m: sample kurtosis and skewness, bias-corrected.
- 2011-02-25 08:54 hewitson
  - \* @plist/simplify.m: A method which simplifies a plist. This is hidden and intended for use in speed critical methods. It replaces the paramValue with the default value and throws away all options and properties, thus making the plist much lighter.
- 2011-02-24 21:01 mauro
  - \* @ao/average.m: A method to average aos point-by-point. For each point, an average is taken over all the input objects.
- 2011-02-24 18:17 congedo
  - \* +utils/@math/Fpdf.m: F distribution function
- 2011-02-24 16:57 hewitson
  - \*
    tests/models/@ltpda\_builtin\_model\_utp/test\_builtin\_model\_versions.m:
    Add a new test that checks the object built from the model can be rebuilt properly.
- 2011-02-24 11:16 congedo
  - \* @pest/combineExps.m: bug fixed
- 2011-02-24 08:43 hewitson
  - \* @ao/elementOp.m: We should only check the sample rate for tsdata objects. It's ok to divide out two frequency series with different sample rates since there the fs is only for information.

#### 2011-02-24 07:56 hewitson

\* @ao/melementOp.m: bug fix: we should always set the yunits, even is caller is method.

#### 2011-02-24 07:15 mauro

\* @ao/: acos.m, asin.m, atan.m, cos.m, diag.m, eig.m, imag.m, ln.m, log.m, log10.m, mean.m, mode.m, norm.m, phase.m, round.m, sign.m, sqrt.m, sum.m, svd.m, tan.m, uminus.m, unwrap.m, var.m, abs.m, angle.m, conj.m, det.m, exp.m, inv.m, median.m, real.m, sin.m, std.m: Speeded up a little bit by calling getInfo('None') that produces not sets nor plists. We do not want to store all the plists in the history anyways.

#### 2011-02-23 16:33 marc1

\* @ao/whiten1D.m: option to whiten to scale the output by the power inband (we conserve the power inband). The default behaviour is unchanged, but this can be used as an option.

#### 2011-02-23 16:14 hewitson

\* @ssm/simulate.m: bug fix: we forgot to add history to the new output matrix object.

### 2011-02-23 16:13 hewitson

\* tests/@ltpda\_test\_runner/get\_builtin\_model\_tests.m: include the extension module tests.

#### 2011-02-23 14:46 hewitson

\* +utils/@helper/callerIsMethod.m: Add collect\_values to the
exceptions list, and make the exceptions list persistent between
calls.

#### 2011-02-23 12:56 ingo

\* @ltpda\_uoh/addHistory.m: bug fix: It is necessary to index the input object to set the UUID.

## 2011-02-23 07:47 hewitson

\* @plist/eq.m: Handle the fact that param.val may not be a paramValue object.

## 2011-02-22 16:54 hewitson

\* @ssm/subsParameters.m: Bug fix. We need to check for the info call independent of the callerIsMethod flag.

### 2011-02-22 16:54 hewitson

\* @paramValue/setValIndexAndOptions.m: It seems it's faster to check nargout in the caller and avoid calling copy() than to do the checking inside copy(). The overhead of calling the function can become significant. It seems an 'if' clause is cheaper.

## 2011-02-22 16:53 hewitson

\* @param/setProperty.m: If the user wants to set a property, we first make sure that the value is promoted to a paramValue because that's where we store the properties structure. We may consider moving the properties structure from the paramValue to the param class.

## 2011-02-22 16:51 hewitson

\* @plist/pset.m: Faster implementation.

## 2011-02-22 16:51 hewitson

\* @param/param.m: Removed the setter rules for description and value. In principle, wherever possible, setter rules should be moved to the user interface level (in the setters of user classes).

#### 2011-02-22 16:50 hewitson

\* @LTPDAworkbench/mpl2jpl.m, @param/setDefaultIndex.m, @param/setDefaultOption.m: Handle the fact that param.val may not be a paramValue object.

#### 2011-02-22 16:50 hewitson

\* +utils/@math/mhsample.m: Build the bode plist and pass it in to the log-liklihood calculation.

#### 2011-02-22 16:48 hewitson

\* @matrix/mcmc.m: We can lighten the model before the fitting. Since we copy every time in the loop, we should remove all unnecessary information. For all objects, clearing the history is a must; for SSM we can clear other stuff as well.

### 2011-02-22 16:47 hewitson

\* +utils/@math/math.m: Please, please, please declare methods with
varargout = foo(varargin)

so that changing the implementation doesn't need a change in the declaration.

### 2011-02-22 16:47 hewitson

\* @LTPDAworkbench/LTPDAworkbench.m: Don't throw an error for models which can't be uploaded to the workbench. Some old models still exist so we just skip over them but throw a warning on the terminal.

### 2011-02-22 16:46 hewitson

\* @ltpda\_obj/ltpda\_obj.m: Don't hide all these inherited methods because this means we have overriden them with empty methods. Seems strange, but seems to be true.

### 2011-02-22 16:45 hewitson

\* @ltpda\_data/ltpda\_data.m: Faster way of checking a property exists in the object.

### 2011-02-22 16:45 hewitson

- \* +utils/@math/loglikehood\_ssm.m: 1) pass in the bode plist from above so we don't create it every time in the loop
  - 2) tell doSubsParameters that we are a method so we can do the optimised routine
  - 3) use the new faster bode output getting the data directly instead of going through AOs.

### 2011-02-22 16:43 hewitson

\* @LTPDAworkbench/lib.mat: Updated library for the gui.

#### 2011-02-22 16:43 hewitson

\* @ssm/keepParameters.m: Set the callerIsMethod flag and pass it to doSubsParameters().

## 2011-02-22 16:42 hewitson

\* +utils/@helper/isinfocall.m: Slightly faster version.

#### 2011-02-22 16:41 hewitson

\* @param/getDefaultVal.m, @param/getOptions.m,
 @plist/getOptionsForParam.m, @param/getProperty.m,
 @param/getVal.m: Handle the fact that param.val may not be a
 paramValue object.

### 2011-02-22 16:41 hewitson

\* @ssm/doSubsParameters.m: Minor optimisation and fix in help header.

## 2011-02-22 16:41 hewitson

\* @ssm/doSetParameters.m: A bug fix. Since pset appends a key that's not present, we need to check for the key's existence before calling pset.

#### 2011-02-22 16:40 hewitson

\* @param/copy.m: Since we now support 'naked' parameter values, we need to decide whether to call copy() or not.

## 2011-02-22 16:39 hewitson

\* +utils/@helper/callerIsMethod.m: Don't restrict to looking for methods in 'classes/@someclass/somemethod.m' but allow any class method to trigger this flag.

#### 2011-02-22 16:39 hewitson

- \* @ssm/bode.m: 1) bug fix: we always have to check for the info call, regardless of the callerIsMethod flag since we call for info from inside methods (getting help, for example).
  - 2) added a fast output case for inside fitters:

```
[d1 d2 d3 d4 ...] = bode(sys, pl)
```

where d\* are numeric vectors. This means we skip the creation of AOs. This case works if callerIsMethod and nargout == number of output vectors.

3) split apart the creation of AO for profiling. This can be put back together later.

# 2011-02-22 16:36 hewitson

\* @param/attachToDom.m: Handle the fact that param.val may not be a paramValue object.

## 2011-02-22 16:35 hewitson

- \* @plist/append.m: 1) better handling of the shortcut case
  pl.append(param) and also handle the new possibility that the
  param value is not a paramValue object
  - 2) add a new shortcut case for pl.append(key, val)
  - 3) in the shortcut cases, throw an error if the key being appended exists already (this was a bug before)
  - 4) faster implementation of pl.append(key1, val1, key2, val2,
    ...)

#### 2011-02-22 16:32 hewitson

\* @ao/ao.m: 1) bug fix in the default plist for "from pest". We need to set a sensible index, even for an empty value. Either use

the factor methods or

- {1, {{}}, paramValue.SINGLE}
- 2) Don't make an empty plist for plotinfo by default. (Hopefully this doesn't break too many things)

#### 2011-02-22 15:02 luigi

\* +utils/@math/: boxplot.m, kstest.m, qqplot.m: some bug fixed

#### 2011-02-22 11:37 luigi

\* +utils/@math/: cdfplot.m, ppplot.m, qqplot.m: some bug fixed

### 2011-02-22 11:26 adrien

\* @ao/spsd.m: Repair broken ASD behavior, and update statistical explanations for variance

#### 2011-02-21 18:00 adrien

\* @ao/gapfillingoptim.m: code optimized, made faster using the new matrix multiplication for freq. averaging. Nothing changed for the user. Circshift is not called in the optimization loop anymore.

#### 2011-02-21 17:59 adrien

\* @ao/optSubtraction.m: code optimized, made faster using the new matrix multiplication for freq. averaging. Nothing changed for the user.

### 2011-02-21 17:58 adrien

\* @ao/spsd.m: Now PSD stats match theory. A more accurate "effective" number of averages takes into account the case when some input dominate the average, and computes the variance accordingly." software/m-toolbox/classes/@ao/spsd.m

## 2011-02-21 15:24 hewitson

\* @ssm/subsParameters.m: use callerIsMethod utility.

### 2011-02-21 15:24 hewitson

\* @ssm/ssm.m, @ssmblock/ssmblock.m, @ssmport/ssmport.m: Added the hidden clearAllUnits method.

## 2011-02-21 15:23 hewitson

\* @ssm/doSubsParameters.m: Use callerIsMethod flag passed from caller and our optimised version of symbolic eval. Hopefully the vectorize() method we replaced is doing what we think.

## 2011-02-21 15:23 hewitson

\* @ssmport/copy.m: Removed commented out code and skip copying units if they are empty. For use in other methods (fitters etc) we can clear all port units to be [] using the new ssm.clearAllUnits. This clearAllUnits method is hidden from the user. Clearing all the units is dangerous since many places in the SSM class index this object without checking first what it is. However, for internal use we can be careful and benefit from not copying units, which is expensive.

#### 2011-02-21 15:20 hewitson

\* @ssmblock/copy.m: Removed commented out code.

### 2011-02-21 15:20 hewitson

\* @ssm/bode.m: use the new callerIsMethod utility.

NOTE: the 'internal' flag is gone. If bode is called from within a class method, then it will automagically do what you want.

### 2011-02-18 17:58 congedo

\* +utils/@math/: Ftest.m, SFtest.m, math.m: SFtest: Spectral
F-test. this function performes an F-test, on two PSDs and solves
the following hypothesis test: H0 ('the two spectra belong to the
same statistical distribution') is rejected or not in favour of
H1 ('the two spectra belong to different statistical
distributions').

### 2011-02-18 17:54 luigi

- \* @matrix/linlsqsvd.m: some bugs fixed added units propagation
  2011-02-18 17:53 luigi
- \* @pest/eval.m: added unit propagation for model of matrix of aos 2011-02-18 17:49 luigi
- \* @pest/eval.m: bug fixed in evaluation for a matrix model of aos 2011-02-18 17:48 ingo
  - \* @cdata/applymethod.m, @cdata/applyoperator.m, @cdata/cdata.m, @cdata/char.m, @cdata/display.m, @cdata/getDy.m, @cdata/getY.m, @cdata/minus.m, @cdata/plus.m, @cdata/setDy.m, @cdata/setY.m, @cdata/setYunits.m, @cdata/update\_struct.m, @data2D/applymethod.m, @data2D/applyoperator.m, @data2D/char.m, @data2D/data2D.m, @data2D/getDx.m, @data2D/getDy.m, @data2D/getX.m, @data2D/getY.m, @data2D/setDx.m, @data2D/setDy.m, @data2D/setX.m, @data2D/setXY.m, @data2D/setXunits.m, @data2D/setY.m, @data2D/setYunits.m, @data3D/applymethod.m, @data3D/applyoperator.m, @data3D/data3D.m, @data3D/getZ.m, @data3D/setZ.m, @fsdata/display.m, @fsdata/fsdata.m, @fsdata/setEnbw.m, @fsdata/setFs.m, @fsdata/setNavs.m,
    @fsdata/setT0.m, @fsdata/update\_struct.m, @history/char.m, @history/display.m, @history/getNodes.m, @history/hist2dot.m, @history/hist2m.m, @history/history.m, @history/plot.m, @history/string.m, @history/update\_struct.m, @ltpda\_data/getDy.m, @ltpda\_data/getY.m, @ltpda\_data/ltpda\_data.m, @ltpda\_data/setDy.m, @ltpda\_data/setY.m, @ltpda\_data/setYunits.m, @ltpda\_nuo/ltpda\_nuo.m, @minfo/addChildren.m, @minfo/char.m, @minfo/display.m, @minfo/minfo.m, @minfo/modelOverview.m, @minfo/setArgsmax.m, @minfo/setArgsmin.m, @minfo/setDescription.m, @minfo/setModifier.m, @minfo/setMversion.m, @minfo/setOutmax.m, @minfo/setOutmin.m, @minfo/tohtml.m, @minfo/update\_struct.m, @param/char.m, @param/display.m, @param/param.m, @param/setDesc.m, @param/setKey.m, @param/setKeyVal.m, @param/setVal.m, @param/string.m, @param/update\_struct.m, @paramValue/char.m, @paramValue/display.m, @paramValue/getOptions.m, @paramValue/getVal.m, @paramValue/paramValue.m, @paramValue/update\_struct.m, @plist/string.m, @provenance/char.m, @provenance/display.m, @provenance/getEncodedString.m, @provenance/provenance.m, @provenance/setFromEncodedInfo.m, @provenance/string.m, @provenance/update\_struct.m, @pz/char.m, @pz/cp2iir.m, @pz/cz2iir.m, @pz/display.m, @pz/fq2ri.m, @pz/pz.m, @pz/resp.m, @pz/ri2fq.m, @pz/rp2iir.m, @pz/rz2iir.m, @pz/setF.m, @pz/setQ.m, @pz/setRI.m, @pz/string.m, @pz/update\_struct.m, @specwin/display.m, @specwin/get\_window.m, @specwin/specwin.m, @specwin/string.m, @specwin/update\_struct.m, @ssmblock/char.m, @ssmblock/display.m, @ssmblock/getPortsAtIndices.m, @ssmblock/getPortsWithName.m, @ssmblock/ssmblock.m, @ssmblock/string.m, @ssmblock/update\_struct.m, @ssmport/char.m, @ssmport/display.m, @ssmport/ssmport.m, @ssmport/string.m, @ssmport/update\_struct.m, @time/char.m, @time/double.m, @time/getTimezones.m, @time/string.m, @time/time.m,

@tsdata/collapseX.m, @tsdata/display.m, @tsdata/fixNsecs.m,
@tsdata/getX.m, @tsdata/growT.m, @tsdata/setFs.m,
@tsdata/setNsecs.m, @tsdata/setT0.m, @tsdata/tsdata.m,
@tsdata/update\_struct.m, @unit/HzToS.m, @unit/char.m,
@unit/display.m, @unit/eq.m, @unit/factor.m, @unit/mpower.m,
@unit/mrdivide.m, @unit/mtimes.m, @unit/ne.m, @unit/plus.m,
@unit/power.m, @unit/rdivide.m, @unit/sToHz.m, @unit/setVals.m,
@unit/simplify.m, @unit/split.m, @unit/sqrt.m, @unit/string.m,
@unit/times.m, @unit/tolabel.m, @unit/unit.m,
@unit/update\_struct.m, @xydata/display.m,
@xydata/update\_struct.m, @xydata/xydata.m, @xyzdata/char.m,
@xyzdata/display.m, @xyzdata/update\_struct.m, @xyzdata/xyzdata.m:
- Use in the constructors a switch-case instead of if nargin ==
1, elseif nargin == 2, ... because nargin cost time - remove the
HISTORY: part from the header because we capture the history of
the file with cvs. - Replace collect\_objects with [varargin{:}]
where it was possible

#### 2011-02-18 17:44 ingo

\* @history/rebuild.m, @param/mux.m: [no log message]

### 2011-02-18 17:13 luigi

\* @matrix/linfitsvd.m: revised output model assignement

### 2011-02-18 17:10 luigi

\* @matrix/linfitsvd.m: now the model is assigned pest creation is revised

### 2011-02-18 17:09 luigi

\* @matrix/linlsqsvd.m: the mdoel now is assigned revised the naming

#### 2011-02-18 17:09 luigi

\* @pest/eval.m: added the possibility of handling models in the form of aos and matrix

### 2011-02-18 17:07 luigi

\* @ao/linlsqsvd.m: changed the way the model is assigned the naming is a littel fixed

#### 2011-02-18 07:53 mauro

\* @ao/: cov.m, mean.m, median.m, mode.m, norm.m, std.m, sum.m,
var.m: Use the call to utils.helper.callerIsMethod to control: the adding of history when building objects - the call to the
minfo constructor - the building of the default plist

## 2011-02-17 22:08 mauro

\* @ao/mtimes.m: Use the call to utils.helper.callerIsMethod to control: — the adding of history when building objects — the call to the minfo constructor — the building of the default plist

#### 2011-02-17 22:06 mauro

\* @ao/melementOp.m: Help updated

### 2011-02-17 17:16 luigi

\* +utils/@math/: kstest.m, math.m: an utils function to calculate kolmogorov - smirnov test

## 2011-02-17 15:34 mauro

\* @ao/: atan2.m, hypot.m, mpower.m, power.m: 1) Added a call to utils.helper.callerIsMethod which we can use to control: — the adding of history when building objects — the call to the minfo

constructor 2) Help fixed 3) Code harmonization

#### 2011-02-17 15:34 mauro

\* @ao/applyoperator.m: Accepts now the input flag callerIsMethod to enable a lighter execution (no history setting, no names, ...)

#### 2011-02-17 15:23 ingo

\* @specwin/: char.m, string.m, plot.m, display.m: Using [varargin{:}]; instead of the method collect\_objects.

#### 2011-02-17 15:21 ingo

\* @specwin/plot.m: bug fix: Plot for a window with not a specifies window length a default length of 100.

#### 2011-02-17 15:20 ingo

\* @specwin/specwin.m: Remove the properties and methods from the header.

### 2011-02-17 15:19 ingo

\* @specwin/: win\_bartlett.m, win\_bh92.m, win\_fthp.m, win\_ftni.m, win\_ftsrs.m, win\_hamming.m, win\_hanning.m, win\_hft116d.m, win\_hft144d.m, win\_hft169d.m, win\_hft196d.m, win\_hft223d.m, win\_hft248d.m, win\_hft70.m, win\_hft90d.m, win\_hft95.m, win\_nuttall3.m, win\_nuttall3a.m, win\_nuttall3b.m, win\_nuttall4.m, win\_nuttall4a.m, win\_nuttall4b.m, win\_nuttall4c.m, win\_rectangular.m, win\_sft3f.m, win\_sft3m.m, win\_sft4f.m, win\_sft4m.m, win\_sft5f.m, win\_sft5m.m, win\_welch.m: Adapt function name because the m-file name have only lower letters.

#### 2011-02-17 15:17 ingo

\* +utils/@helper/objdisp.m: Add special case for empty arrays.

#### 2011-02-17 12:37 mauro

\* @cdata/applyoperator.m: Code harmonizd with data2D/applyoperator

## 2011-02-17 12:25 miquel

\* @smodel/smodel.m: Added a rule for the trans filed. This field comes always as a string now. I needed this to commit my pest objs to the repository (because they contain an smodel in the model field) The rule can be discussed and extended during next meeting changes in the code by Ingo

## 2011-02-17 12:24 mauro

\* @data2D/applyoperator.m: Code efficiency improved by avoiding to make copies of the vectors Extended the dimensional checks to all callers, not only power

### 2011-02-17 12:10 mauro

\* @ao/applyoperator.m: Cosmetic changes

#### 2011-02-17 12:09 mauro

\* @cdata/applyoperator.m: Help and internal messages fixed

#### 2011-02-17 11:46 miguel

\* @matrix/mcmc.m: setName corrected

#### 2011-02-17 10:17 mauro

\* @ao/: abs.m, acos.m, angle.m, asin.m, atan.m, conj.m, cos.m,
det.m, diag.m, eig.m, exp.m, imag.m, inv.m, ln.m, log.m, log10.m,

phase.m, real.m, round.m, sign.m, sin.m, sqrt.m, svd.m, tan.m, uminus.m, unwrap.m: 1) Added a call to utils.helper.callerIsMethod which we can use to control: — the adding of history when building objects — the call to the minfo constructor 2) Help fixed 3) Code harmonization

#### 2011-02-17 10:16 mauro

\* @ao/applymethod.m: Added a call to utils.helper.callerIsMethod which we can use to control: — the adding of history when building objects — the call to the minfo constructor

#### 2011-02-16 15:16 miguel

\* @matrix/crb.m: Noise enters via plist. Changed names of plist fields Accepts matrix models with aliases

#### 2011-02-16 15:12 congedo

\* @ao/tdfit.m, @matrix/tdfit.m: small changes

#### 2011-02-16 12:14 miquel

\* @matrix/mcmc.m: big fix

### 2011-02-16 10:45 miquel

\* @matrix/mcmc.m: 1) handles smodels with aliases 2) input signals must be entered via plist 3) homogeneizing plist fields names: params -> FitParams

# 2011-02-16 10:30 miquel

\* @smodel/assignalias.m: bug fix

#### 2011-02-15 17:32 luigi

\* @smodel/smodel.m: added rules for aliasNames and aliasValues

### 2011-02-15 17:02 luigi

\* @matrix/linfitsvd.m: added a very naive way of forcing boundaries to parameters

## 2011-02-15 15:24 luigi

\* +utils/@helper/helper.m: added [mu,sigma] = CPUbenchmark static
methods must be declared in order to be used

## 2011-02-15 10:59 ingo

\* @ltpda\_uo/save.m: Make sure that all objects have a UUID. This should only happen for PLISTs.

### 2011-02-15 10:48 ingo

\* @ltpda\_uo/update.m: - Use for the created time of PLISTs the current time - Set for PLISTs the UUID if the field is empty.

### 2011-02-15 10:33 ingo

\* @stattest/stattest.m: Set the access level of the methods 'fromDom' from private to protected.

# 2011-02-15 10:12 ingo

\* @history/fromDom.m: Bug fix. The attribute 'creator' doesn't exist for XML files which are saved with LTPDA 2.3.1. In this case is it necessary to get the creator from the plistUsed

# 2011-02-15 07:33 mauro

\* @ao/: mrdivide.m, rdivide.m, times.m: Use the call to
 utils.helper.callerIsMethod also to control: - the adding of
 history when building objects - the call to the minfo constructor
 - the building of the default plist

#### 2011-02-15 07:14 mauro

\* @ao/: minus.m, plus.m: Use the call to
 utils.helper.callerIsMethod also to control: - the adding of
 history when building objects - the call to the minfo constructor
 - the building of the default plist

#### 2011-02-15 07:07 mauro

\* @ao/: and.m, or.m: 1) Added a call to utils.helper.callerIsMethod which we can use to control: — the adding of history when building objects — the call to the minfo constructor 2) Help fixed 3) Code harmonization

#### 2011-02-15 06:59 mauro

\* @ao/split.m: Added a call to utils.helper.callerIsMethod which we can use to control the adding of history when building objects

## 2011-02-14 20:33 ingo

\* @ao/angle.m, @ao/fftfilt\_core.m, @ao/ifft\_core.m,
 @ao/integrate.m, @ao/ltp\_ifo2acc.m, @ao/mdc1\_ifo2acc\_fd.m,
 @ao/phase.m, @matrix/fftfilt.m, @matrix/fromValues.m,
 @pest/find.m, @ssm/bode.m, @ssm/bodecst.m, @ssm/kalman.m,
 @ssm/resp.m, @ssm/respcst.m, @ssm/simulate.m: - remove the
 'internal' part from the methods: setYunits because now we use in
 this method the new feature: utils.helper.callerIsMethod

## 2011-02-14 20:30 ingo

\* @smodel/attachToDom.m: - add the property 'trans' to the DOM nodes.

# 2011-02-14 20:29 ingo

\* @plist/fromRepository.m: Remove the part which sets the 'creator' because this property doesn't exist any more.

### 2011-02-14 20:28 ingo

\* @param/attachToDom.m: add the 'desc' of a parameter to DOM

## 2011-02-14 20:27 ingo

\* @ltpda\_uoh/fromDom.m: - new version of fromDom which calls the super-class. - it gets the child nodes with xpath - easier to maintain - cost ca 8-10% more time

## 2011-02-14 20:27 ingo

\* @ltpda\_uo/submit.m: - Set for PLISTs the UUID before uploading. - The PLISTs don't have any created-time because we have deleted the property 'created' --> use instead the current time.

### 2011-02-14 20:26 ingo

\* @history/attachToDom.m: attach the new property 'creator'

#### 2011-02-14 20:25 ingo

\* @cdata/attachToDom.m, @cdata/cdata.m, @cdata/copy.m,
 @cdata/fromStruct.m, @data2D/copy.m, @data2D/data2D.m,
 @data2D/fromStruct.m, @ltpda\_data/attachToDom.m,
 @ltpda\_data/copy.m, @ltpda\_data/fromStruct.m,
 @ltpda\_data/getDy.m, @ltpda\_data/getY.m,
 @ltpda\_data/ltpda\_data.m, @ltpda\_data/setDy.m,

@ltpda\_data/setY.m, @ltpda\_data/setYunits.m: - moved the proeprties 'y', 'dy' and 'yunits' to the ltpda\_data class.

### 2011-02-14 20:23 ingo

\* @ao/fromDom.m, @cdata/fromDom.m, @collection/fromDom.m, @data2D/fromDom.m, @data3D/fromDom.m, @filterbank/fromDom.m, @fsdata/fromDom.m, @history/fromDom.m, @ltpda\_data/fromDom.m, @ltpda\_filter/fromDom.m, @ltpda\_nuo/fromDom.m, @ltpda\_obj/fromDom.m, @ltpda\_tf/fromDom.m, @ltpda\_uo/fromDom.m, @matrix/fromDom.m, @miir/fromDom.m, @miir/fromDom.m, @miir/fromDom.m, @param/fromDom.m, @parfrac/fromDom.m, @pst/fromDom.m, @pst/fromDom.m, @provenance/fromDom.m, @pz/fromDom.m, @pz/fromDom.m, @ssmodel/fromDom.m, @ssm/fromDom.m, @ssm/fromDom.m, @ssmblock/fromDom.m, @ssmport/fromDom.m, @time/fromDom.m, @timespan/fromDom.m, @tsdata/fromDom.m, @unit/fromDom.m, @xydata/fromDom.m, @xydata/fromDom.m: - new version of fromDom which calls the super-class. - it gets the child nodes with xpath - easier to maintain - cost ca 8-10% more time

#### 2011-02-14 20:20 ingo

\* @fsdata/fsdata.m, @history/history.m, @minfo/minfo.m, @param/param.m, @plist/plist.m, @provenance/provenance.m, @pz/pz.m, @specwin/specwin.m, @ssmblock/ssmblock.m, @ssmport/ssmport.m, @time/time.m, @tsdata/tsdata.m, @unit/unit.m, @xydata/xydata.m, @xyzdata/xyzdata.m: Set the access level of the methods 'fromDom' from private to protected.

#### 2011-02-14 20:17 ingo

\* @data3D/data3D.m, @ltpda\_filter/ltpda\_filter.m,
 @ltpda\_nuo/ltpda\_nuo.m, @ltpda\_obj.ltpda\_obj.m,
 @ltpda\_tf/ltpda\_tf.m, @ltpda\_uo/ltpda\_uo.m,
 @ltpda\_uoh/ltpda\_uoh.m: - add propotype with protected access
 varargout = fromDom(varargin)

### 2011-02-14 20:13 ingo

\* @ao/ao.m, @collection/collection.m, @filterbank/filterbank.m, @mfir/mfir.m, @miir/miir.m, @parfrac/parfrac.m, @pest/pest.m, @pzmodel/pzmodel.m, @rational/rational.m, @smodel/smodel.m, @ssm/ssm.m, @timespan/timespan.m: 1. remove the updating of the UUID in the initObjectWithSize because we set the UUID only in 'addHistory' 2. Set the access level of the methods 'fromDom' from private to protected.

## 2011-02-14 20:10 ingo

\* @matrix/matrix.m: 1. remove the updating of the UUID in the initObjectWithSize because we set the UUID only in 'addHistory' 2. Set the access level of the methods 'fromDom' from private to protected.

### 2011-02-14 17:33 mauro

\* +utils/@helper/callerIsMethod.m: Updated to work also on PC; the regexp was failing with the previous syntax Comments fixed Removed dead code

## 2011-02-14 17:09 luigi

\* +utils/@math/: cdfplot.m, math.m, ppplot.m, qqplot.m: extended to work also with normal and chi2 distribution functions

# 2011-02-14 17:08 luigi

\* +utils/@math/: Chi2cdf.m, Chi2inv.m, Normcdf.m, Norminv.m: utils
to calculate cumulative and inverse cumulative normal and chi2
distribution functions

#### 2011-02-14 15:57 ingo

\* @ltpda\_uoh/creator.m: bug fix: We have forgotten to adapt the recursive part to the new position of the creator object. Now it is stored in the history object.

#### 2011-02-14 15:57 ingo

\* @ltpda\_uoh/ltpda\_uoh.m: remove prototype of fromDom

#### 2011-02-14 14:32 mauro

\* @smodel/: laplace.m, ztrans.m, diff.m, fourier.m, ifourier.m, ilaplace.m, iztrans.m, simplify.m: Internal comments fixed

### 2011-02-14 14:32 mauro

\* @smodel/times.m: Help updated

#### 2011-02-14 14:20 ingo

\* @matrix/fromInput.m: bug fix: The methods set the wrong shape to the plist.

## 2011-02-14 12:55 ingo

\* @ltpda\_uoh/ltpda\_uoh.m: bug fix: We have forgotten to adapt the recursive part to the new position of the creator object. Now it is stored in the history object.

#### 2011-02-14 12:29 congedo

\* @pest/combineExps.m: updated to handle the combination of different parameter sets

#### 2011-02-14 10:50 mauro

\* @ao/elementOp.m: Bug fixed for the case of the call in the form aaa = plus(a1, a2, a3) Help updated

### 2011-02-14 10:49 mauro

\* @ao/fromVals.m: Help updated and clarified

## 2011-02-14 10:44 luigi

\* @matrix/linfitsvd.m: added the option to set alias internally.
default is false

## 2011-02-13 21:55 luigi

\* +utils/@math/boxplot.m: added the possibility to plot full data
or only the data out of confidence level

### 2011-02-13 20:49 luigi

\* +utils/@math/: boxplot.m, math.m: bug fixed. Now used can input different length datasets Added help

### 2011-02-13 20:07 luigi

\* +utils/@math/: boxplot.m, math.m: an util to make box plot of

## 2011-02-13 16:19 luigi

\* +utils/@math/: cdfplot.m, ppplot.m, qqplot.m: bug fixed in the
 default paraameters

## 2011-02-11 21:20 luigi

\* @matrix/linfitsvd.m: updated to handle aliases

## 2011-02-11 21:00 luigi

\* @smodel/: assignalias.m, smodel.m: a method to assign values to the alias before the fit machinery and fftfilt

### 2011-02-11 20:59 luigi

\* @smodel/: copy.m, double.m, elementOp.m: methods updated to handle aliases

#### 2011-02-11 18:13 congedo

\* @ao/tdfit.m: performance optimization completed: now it goes faster of a factor 2

#### 2011-02-11 16:24 hewitson

\* +utils/@helper/callerIsMethod.m: Another exception for the callerIsMethod tool. ao/compute is also a transparent method which doesn't add history but expects the inner calculations to do so.

## 2011-02-11 16:15 congedo

\* @ao/tdfit.m, @matrix/tdfit.m: minor changes (default plist and help).

#### 2011-02-11 16:04 hewitson

\* @ao/applyoperator.m: Simplify the call to the underlying data/applyoperator.

## 2011-02-11 16:01 hewitson

\* @ao/: elementOp.m, melementOp.m: Bug fix. Better handle the promoting of numbers to AOs to allow the callerIsMethod stuff to work. Instead of using the AO constructor, we use fromVals directly overriding the callerIsMethod flag.

### 2011-02-11 15:20 hewitson

\* @data2D/applyoperator.m: Go back to the old version because I broke it.

### 2011-02-11 14:51 hewitson

\* @history/history.m: Bug fix. The setting of the UUID got commented out somehow.

## 2011-02-11 14:37 hewitson

\* @plist/fromStruct.m: Don't try to set the creator and created files.

## 2011-02-11 14:31 hewitson

\* @ao/melementOp.m: Bug fix. We passed in the callerIsMethod flag but didn't change the input indexing.

### 2011-02-11 14:22 hewitson

\* @ltpda\_uoh/addHistory.m: Remove the pause(0.001). The requirement still applies, but we handle it differently. Now we store the last processing time as a persistent variable and check that it has changed between adding history steps. In practice this is always true because the preceeding steps in addHistory anyway take more than 1ms at the moment.

### 2011-02-11 13:51 hewitson

\* +utils/@helper/callerIsMethod.m: The latest version which we

think is working fine.

### 2011-02-11 13:50 hewitson

\* @ao/char.m, @ltpda\_obj/isprop.m: Make use of the callerIsMethod flag.

#### 2011-02-11 13:49 hewitson

\* @ao/setYunits.m: Remove the old 'internal' call and instead deal with the callerIsMethod flag.

#### 2011-02-11 13:48 hewitson

\* @ao/: and.m, minus.m, mrdivide.m, mtimes.m, or.m, plus.m, rdivide.m, times.m: Make use of the callerIsMethod flag passed from the operators.

#### 2011-02-11 13:44 hewitson

\* @plist/: fromDom.m, fromFile.m: Remove the creator and created properties.

#### 2011-02-11 13:41 hewitson

\* @plist/attachToDom.m: Remove the saving of the creator and created properties.

### 2011-02-11 13:37 hewitson

\* @plist/copy.m: Remove the copying of the newly removed creator and created fields.

### 2011-02-11 13:36 hewitson

\* @ltpda\_uoh/creator.m: Now we get the creator directly from the history object instead of from the last plist. We removed creator from plist to make it much lighter.

### 2011-02-11 13:35 hewitson

\* @matrix/fromValues.m: Make use of the callerIsMethod flag passed from the constructor.

### 2011-02-11 13:34 hewitson

\* @matrix/: mtimes.m, inv.m: Make use of the callerIsMethod.

## 2011-02-11 13:33 hewitson

\* @matrix/: times.m, rdivide.m, plus.m, minus.m: Make use of the callerIsMethod and pass it to elementOp.

#### 2011-02-11 13:32 hewitson

\* @ao/elementOp.m: Make use of the callerIsMethod flag passed from the operators.

#### 2011-02-11 13:30 hewitson

 $\ast$  @ao/fromVals.m: Make use of the callerIsMethod flag passed from the constructor.

#### 2011-02-11 13:30 hewitson

- \* @matrix/elementOp.m: 1) Use callerIsMethod flag passed from the operators to control adding history or not
  - 2) Remove check on the method since MATLAB will soon tell us if there isn't one and ismethod is expensive.

## 2011-02-11 13:28 hewitson

\* @ltpda\_uoh/addHistory.m: Before an object is added in to a history tree, it get's its UUID set and the same UUID is passed to the history node which is then used in the displaying of history trees.

### 2011-02-11 13:27 hewitson

\* @matrix/fromInput.m: Make use of the callerIsMethod flag passed from the constructor.

#### 2011-02-11 13:26 hewitson

- \* @matrix/matrix.m: 1) use the callerIsMethod to control what fromValues and fromInput does with history.
  - 2) Don't set UUID.

#### 2011-02-11 13:25 luigi

\* +utils/@math/cdfplot.m: changed a parameetr name to be more general

## 2011-02-11 13:25 luigi

\* +utils/@math/: math.m, ppplot.m, qqplot.m: utils mothods for qqplot and ppplot

#### 2011-02-11 13:08 hewitson

- \* @matrix/det.m: 1) Use the new callerIsMethod() routine to speed things up.
  - 2) Don't copy the inner objects since they always get used in expressions with an output.

### 2011-02-11 13:04 hewitson

- \* @history/history.m: 1) Added new property creator which is set when a history object is created.
  - 2) Don't set UUID when creating a history object. It will be set when the history object is added to a history tree.

### 2011-02-11 12:49 hewitson

\* @ltpda\_uo/copy.m: We don't set the UUID. It will be set when needed.

## 2011-02-11 12:46 hewitson

\* @ltpda\_uo/ltpda\_uo.m: Don't set the UUID. It will be set when needed.

## 2011-02-11 12:46 hewitson

\* @plist/: setCreated.m, setCreator.m: Since we removed the created and creator properties, we don't need the setters.

#### 2011-02-11 12:45 hewitson

- \* @plist/plist.m: 1) Removed created. This will be set in the history class when we add history, and retrieved from there by the created() method.
  - 2) Removed creator. This will be set in the history constructor now. The creator() method retrieves it from the first history step. That means objects with no history have no creator.
  - 3) Removed setting of the created property.
  - 4) Don't set UUID in initObjectWithSize.

5) Removed declaration of created and creator setter methods.

#### 2011-02-11 12:43 hewitson

\* @ao/ao.m: 1) Changed verbose level output to PROC3 for constructor message 2) Added a call to utils.helper.callerIsMethod which we can use to control the adding of history when building objects. 3) the callerIsMethod flag is passed to fromVals() 4) remove setting the UUID in initObjectWithSize - UUIDs will only be set when 'exporting' objects out of the current MATLAB through save, submit etc.

### 2011-02-11 11:21 hewitson

\* @smodel/smodel.m: Added two new experimental fields for aliases.

#### 2011-02-11 10:49 miquel

\* @matrix/mcmc.m: make a copy of the input model as well

#### 2011-02-10 18:06 luigi

\* +utils/@math/: cdfplot.m, math.m: an utils for cumulative
distribution plot

# 2011-02-10 17:42 congedo

\* @matrix/tdfit.m: cleaned unused line

### 2011-02-10 17:41 congedo

\* @pest/tdChi2.m: updated to use MATRIX and COLLECTION

### 2011-02-10 17:09 marc1

\* +utils/@math/loglikehood\_ssm.m: little bug fixed when comparing number of inputs (1st case)

### 2011-02-10 17:06 ingo

\* +utils/@plottools/restoreDefaultPlotSettings.m: Now, I know what different was in my last submit. I have removed a semicolon -> adding the semicolon

### 2011-02-10 17:01 marc1

\* +utils/@math/loglikehood\_matrix.m, @matrix/crb.m, @matrix/mcmc.m: adding processing for the magnetic experiments with mcmc (implemented as a different case, the 2 inputs / 2 ouputs script has not been touched, so no scripts must be broken). Cleaning of commented lines.

### 2011-02-10 17:00 ingo

\* +utils/@plottools/restoreDefaultPlotSettings.m: I don't know what is different but my cvs-program means it is different?

#### 2011-02-10 17:00 marc1

\* +utils/@math/loglikehood\_ssm.m: cleaning the function (and final 'end' deleted as it was not necessary).

#### 2011-02-10 16:59 anneke

\* @ltpda\_uoh/index.m: commented the naming the AO. Now the index is stored in the history of the AO but it is not included in the name of the AO anymore.

# 2011-02-10 14:50 hewitson

\* +utils/@helper/callerIsMethod.m, @matrix/elementOp.m: Bug fixes

to the new method detector and use it in matrix/elementOp and ao/elementOp

### 2011-02-10 13:49 hewitson

\* +utils/@helper/callerIsMethod.m: Bug fixes: in the case that this method is being called from a sub-function, we have to climb the stack until we get out of the calling file. Also, if we are using rebuild() then we always need to add the history.

## 2011-02-10 13:22 ingo

\* +utils/@xml/: getChildByName.m, getChildrenByName.m, xml.m: Add two new methods which gets a child from a node with using xpath.

### 2011-02-10 13:19 congedo

\* @matrix/tdfit.m: polished.

### 2011-02-10 13:00 hewitson

\* @data3D/: applyoperator.m, plus.m: The beginnings of operations for data3D objects.

## 2011-02-10 12:59 hewitson

\* @data3D/data3D.m: Added the dz field.

#### 2011-02-10 12:59 hewitson

\* @data2D/plus.m: Added plus for data2D object. See earlier commit about cdata/plus.

### 2011-02-10 12:57 hewitson

\* @cdata/: minus.m, plus.m, rdivide.m, times.m: Started to implement operators at the data class level. This is a much cleaner separation of responsibilities. Currently this is not used. To be discussed.

# 2011-02-10 12:56 hewitson

\* @cdata/applyoperator.m, @data2D/applyoperator.m: Removed a lot of unnecessary code. I think this is ok since we always call this with only applyoperator(d1,d2,op).

## 2011-02-10 12:55 hewitson

\* @ao/elementOp.m: Now uses the new callerIsMethod trick to skip setting the name and adding the history when it's not necessary.

#### 2011-02-10 12:33 congedo

\* @matrix/tdfit.m: MATRIX version of ao\tdfit.

# 2011-02-10 12:05 hewitson

\* +utils/@helper/callerIsMethod.m: Removed debug output.

### 2011-02-10 11:59 hewitson

\* +utils/@helper/callerIsMethod.m: Slightly optimised version.

#### 2011-02-09 16:47 hewitson

\* @ao/iplot.m: Added an option for xyz plot to stop inverting the y axis.

### 2011-02-09 16:45 hewitson

\* @ao/bicohere.m: A first version of a bicoherence method.

### 2011-02-09 12:37 congedo

\* @ao/: tdfit.m, xfit.m: corrected the way to compute dof for multichannel. small bug fixed.

### 2011-02-09 12:21 luigi

\* @smodel/double.m: some cleanup. removed commented lines

#### 2011-02-09 11:42 luigi

\* @smodel/double.m: using assignin command to assign the value of the parameters in the workspace. This new instruction is more effective that the combination of sprintf and eval

### 2011-02-09 11:26 congedo

\* @pest/tdChi2.m: pest method to compute the chi-square in time-domain, provided the measured outputs, inputs, models and whitening filters. it is important as the unique statistical estimator to compare parameter estimates from different methods.

### 2011-02-09 10:57 mauro

\* @matrix/det.m: Updated this simple test to demonstrate functionality of the helper.callerIsMethod utility. Will be updated soon.

### 2011-02-09 10:55 mauro

\* +utils/@helper/: handleHistory.m, helper.m: Removing handleHistory.m to use a more general callerIsMethod.m

#### 2011-02-09 10:54 mauro

\* +utils/@helper/callerIsMethod.m: A test of an idea. When inserted in a function/method/script, this utility returns true if the caller was a method of an LTPDA class. The usage of the output informations is left to the function where this is included.

#### 2011-02-09 09:39 mauro

\* +utils/@helper/handleHistory.m: Code fixed to work also on Win Help added A couple of TODO with ideas added

### 2011-02-09 09:22 mauro

\* @matrix/det.m: A simple test to demonstrate functionality of the helper.handleHistory utility. Will be removed soon.

# 2011-02-09 09:21 mauro

\* +utils/@helper/: handleHistory.m, helper.m: A test of an idea. When inserted in a function/method/script, this utility returns true if the caller was a method of an LTPDA class. As the ame suggests, it could be for instance used to delegate the handling of expensive tasks like assigning the history etc only to the highest level method in a call.

# 2011-02-08 16:18 mauro

\* @matrix/det.m: Reset the name and history of the internal objects. This is hopefully only a temporary workaround to make the output object lighter. A more global approach is needed ...

## 2011-02-08 16:14 mauro

\* @matrix/elementOp.m: Support: - aos (that might have xunits, in the data field) - smodels (that have xunits)

# 2011-02-08 11:35 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: Make the switch case independent from upper/lower case

2011-02-08 10:00 mauro

\* @ltpda\_uoh/viewHistory.m: Arguable: support (issueing a dedicated warning) for the case where the history of the object was cleared.

2011-02-08 09:54 mauro

\* @ltpda\_uoh/viewHistory.m: This method shows the history of the object. This should be true also for ssm objects. The 'blocks' view method for ssm is now implemented in ssm/dotview

2011-02-08 07:47 ingo

\* @data3D/getZ.m: modify this method is such case that it is possible to access the z-array with two indices.

2011-02-08 07:38 ingo

\* @ao/z.m: new method

2011-02-08 07:15 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: - Stores the plot settings if the user change to 'apply to all figures' - Recovers the settings if the user doesn't want to apply to all figures.

2011-02-08 07:12 ingo

\* +utils/@plottools/: backupDefaultPlotSettings.m, plottools.m, restoreDefaultPlotSettings.m: Add two new methods — stores the current plot settings in the application data. — recovers the stored plot settings from the application data.

2011-02-08 06:54 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: restore MATLAB's default plot settings if the user choose: 'Apply plot settings only to iplot' or 'none'

2011-02-07 17:55 ingo

\* @LTPDAprefs/LTPDAprefs.m: adaptation to java changes.

2011-02-07 17:54 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: apply the plot settings only to MATLAB default plot settings if the use choose: 'apply plot settings for all figures'

2011-02-07 17:53 ingo

\* @ao/iplot.m: apply the plot settings only if the user have selected: 'apply plot settings only for iplot'

2011-02-07 14:32 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: add new preferences

2011-02-07 14:31 ingo

\* @LTPDAprefs/: cb\_removeExtensionPath.m, cb\_removeModelPath.m: remove all selected paths instead only the first path

2011-02-04 19:31 luigi

\* @matrix/filter.m: changed the error message

2011-02-04 19:29 luigi

\* @ao/fftfilt\_core.m: added the possibility to handle collections and aos in order to support the latest changes on matrix/linfitsvd

#### 2011-02-04 19:28 luigi

\* @matrix/linfitsvd.m: introduced the possibility to avoid time domain filtering for the whitening process. The whitening is incorporated in the fftfilt process. The only limitation is that the wf matrix is assumed diagonal

#### 2011-02-04 18:59 congedo

\* @ao/tdfit.m: improving performances

#### 2011-02-04 18:42 luigi

\* @ao/fft\_core.m: some cleanup. removed commented lines

#### 2011-02-04 17:11 congedo

\* @ao/tdfit.m: allowed for selecting which parameters to fit and concatenate all parameter lists

# 2011-02-04 16:50 congedo

\* @pest/combineExps.m: updated to deal with the most general case when we want to combine two or more 'pest's with different parameter sets (partially overlapping). information matrices are reshuffled/sorted to match all the same size and parameter order. also the new dofs are calculated.

## 2011-02-04 15:04 hewitson

\* +utils/@helper/objdisp.m: Some small changes. Firstly we avoid huge long lines of numbers. The length may be discussed.

### 2011-02-04 15:03 hewitson

\* @ao/fromGEOserver.m: Getting data from a GEO server requires the new GEO LTPDA Module and as such needs to use the tools from there.

### 2011-02-04 15:02 hewitson

\* +utils/@modules/: README\_class\_tests.txt, README\_classes.txt,
README\_functions.txt, README\_jar.txt, README\_model\_tests.txt,
README\_models.txt, README\_pipelines.txt, README\_tests.txt:
Template README files for the module builder.

### 2011-02-04 12:13 luigi

\* @ao/fft\_core.m: frequency vector is now calculated by utils.math.getfftfreq

### 2011-02-04 12:11 luigi

\* +utils/@math/: getfftfreq.m, math.m: a methdo which calculate frequency vector for fft

# 2011-02-04 11:55 luigi

\* @parfrac/respCore.m: bug fixed: response must keep the shape of the input frequency vector

#### 2011-02-03 17:18 marc1

\* @ssm/modelHelper\_declareParameters.m: bug fixed in order to enable the possibility of building symbolic parameters with 'symbolic params', equals to 'all', there was a bug that apparently did not do the comparison of strings correctly

# 2011-02-03 16:43 luigi

\* +utils/@math/: math.m, mtxiirresp.m, mtxiirresp2.m,
mtxratresp2.m: some utils for fast calculation of tf response

#### 2011-02-03 16:29 marc1

\* +utils/@math/loglikehood\_ssm.m, @matrix/mcmc.m: function debugged, now ready to perform fast MCMC with SSM, roughly estimated each loop is done in 0.25s in my machine

#### 2011-02-03 16:09 luigi

\* +utils/@math/pfresp.m: change the code for the calculation of the resp for parfrac objects in order to have a faster response calculation

### 2011-02-03 14:46 ingo

\* @LTPDARepositoryManager/LTPDARepositoryManager.m: 'deleteTimer' is not longer a static method now is it a 'normal' class-method -> Adapt the code to this new behaviour.

# 2011-02-03 14:44 ingo

\* @LTPDARepositoryManager/deleteTimer.m: This method is not longer a static method now it is a 'normal' class method.

## 2011-02-03 14:44 ingo

\* @LTPDARepositoryManager/startTimer.m: Create also a new timer if the found timer is not longer valid.

## 2011-02-03 14:34 congedo

\* +utils/@helper/CPUbenchmark.m: CPU benchmark for performance comparisons.

### 2011-02-03 10:31 hewitson

\* +utils/@modules/buildModule.m: Now installs README files.

### 2011-02-03 09:44 hewitson

\* +utils/@models/getBuiltinModelSearchPaths.m: Include models from the extension modules.

# 2011-02-03 09:44 hewitson

\* +utils/@helper/installExtensionsForDir.m: Add the paths to the models.

## 2011-02-02 20:25 adrien

#### 2011-02-02 20:23 adrien

\* @ssm/append.m: Outdate call was removed (ssmblock.posBlock) and replaced with new working call

### 2011-02-02 16:40 ira

\* @ao/: fft.m, ifft.m: Added boolean option "SCALE" to fft.m and ifft.m. When set to TRUE, it scales the output by the sampling

rate of the input timeseries so that the output matches the continuous—domain transforms. Default is FALSE.

#### 2011-02-02 12:45 congedo

\* @pest/combineExps.m: 'displayMethodInfo' corrected. small bug fixed

# 2011-02-02 11:55 congedo

\* @ao/: tdfit.m, xfit.m: no message

## 2011-02-01 16:50 marc1

\* +utils/@math/loglikehood\_ssm.m, @matrix/mcmc.m: making the code faster inside the mcmc method using new bode scheme. To be checked during this week with Miquel.

#### 2011-02-01 15:50 marc1

\* @ssm/bodecst.m: typo corrected

### 2011-02-01 15:48 ingo

\* @matrix/: fromValues.m, matrix.m: Add three new constructors with one new set 'from Values'

matrix(plist('values', ..., 'names', ..., 'yunits', ...))
matrix(doubleArray) matrix(doubleArray, cellArray)

#### 2011-02-01 15:11 marc1

\* @ssm/bodecst.m: Usage of the "internal" flag in the same way we used it in bode

# 2011-02-01 15:10 marc1

\* @ssm/doBode.m: cleaning the function

## 2011-01-31 17:19 luigi

\* @matrix/linfitsvd.m: bug fixed: fit parameters were not updated with ssm models

### 2011-01-31 14:49 hewitson

\* @ssm/bode.m: Some changes to how the internal switch is handled. This needs to be checked through as the changes were done on the fly in the modelling workshop.

# 2011-01-27 13:53 ingo

\* @ao/ao.m, @collection/collection.m, @data2D/data2D.m, @data3D/data3D.m, @fsdata/fsdata.m, @history/history.m, @ltpda\_filter/ltpda\_filter.m, @ltpda\_tf/ltpda\_tf.m, @ltpda\_uo/ltpda\_uo.m, @ltpda\_uoh/ltpda\_uoh.m, @mfir/mfir.m, @miir/miir.m, @minfo/minfo.m, @msym/msym.m, @param/param.m, @paramValue/paramValue.m, @parfrac/parfrac.m, @pest/pest.m, @pz/pz.m, @pzmodel/pzmodel.m, @rational/rational.m, @smodel/smodel.m, @specwin/specwin.m, @ssmblock/ssmblock.m, @time/time.m, @timespan/timespan.m, @tsdata/tsdata.m, @unit/unit.m, @cdata/cdata.m: Removed the outputs of the setter because this is not necessary (nor recommended) for handle classes.

# 2011-01-27 10:18 luigi

\* +utils/@helper/installExtensions.m: bug fixed. res must be initialized to []

### 2011-01-27 08:16 hewitson

\* +utils/@helper/: installExtensions.m, installExtensionsForDir.m: Report to the user that a module has been installed. If class methods were installed they will be available next time that clear all is run.

#### 2011-01-27 08:11 hewitson

\* @ssm/ssm.m: Removed the outputs of the setter because this is not necessary (nor recommended) for handle classes.

Added a new hidden method to clear the numparams field because this is private (as it should be) but it is useful to clear it when in a tight optimisation loop because it is slow to make a copy of it when it contains many parameters (>300 in the LTP case).

#### 2011-01-26 13:54 marc1

\* @ssm/: bode.m, doBode.m: changes to make bode faster: math is optimized for continuous systems. problems with copying parameters still present discrete systems' math have to be optimized still

#### 2011-01-26 10:19 hewitson

\* @ao/double.m: A first (simple) version of a double() method for AOs. It just returns the y values so far.

#### 2011-01-26 10:18 hewitson

\* @ssm/blockMatIndex.m: simplification.

#### 2011-01-26 09:09 hewitson

\* @ssm/reorganize.m: Don't see any need for the warning. If the user uses this, the history is added, so why warn them that they shouldn't use it?

### 2011-01-26 09:06 hewitson

\* @ssm/modifyTimeStep.m: Bug fix to keep supporting the implicit plist call:

s.modifyTimeStep('newtimestep', value)

We should decide to do this for all methods in the toolbox (where possible) or for none.!

# 2011-01-26 08:52 hewitson

\* @ssm/modifyTimeStep.m: support

ssm.modifyTimeStep(aValue)

## 2011-01-26 08:51 hewitson

\* @ssm/blockMatIndex.m: I think this allows us to reorganize symbolic models.

### 2011-01-26 07:44 hewitson

\* +utils/@helper/objdisp.m: Some optimisation.

# 2011-01-26 07:43 hewitson

\* @ssm/reorganize.m: fixed typo in help.

# 2011-01-26 07:28 hewitson

\* @ssm/setParameters.m: Removed unnecessary code and added support for the 'internal' call. This is now orders of magnitude faster.

#### 2011-01-26 07:05 hewitson

\* +utils/@modules/buildModule.m: Bug fix. Better to make the new directories where the user asked for them;)

#### 2011-01-26 07:05 hewitson

\* @ssm/simulate.m: Fixed the output of simulate so that it returns a matrix object and thus allows the history to be properly handled. This means the following old outputs calls are no longer possible:

[out1, out2] = simulate [out1, out2, pl] = simulate

### 2011-01-24 19:00 ingo

\* @ao/ao.m: Modify the header with the help information.

#### 2011-01-24 18:59 ingo

\* +utils/@helper/objdisp.m: Add the feature to display structures.

### 2011-01-24 18:59 ingo

\* +utils/@helper/: displayConstructorExamples.m, helper.m: Add new helper function

### 2011-01-24 11:42 hewitson

\* +utils/@helper/installExtensionsForDir.m: changed to support the new layout of extension modules.

#### 2011-01-24 11:39 hewitson

\* +utils/@modules/: buildModule.m, modules.m: New utilities for handling extension modules.

### 2011-01-21 18:18 congedo

\* @ao/: tdfit.m, xfit.m: first integration of SSMs

## 2011-01-19 17:31 ingo

\* +utils/@helper/objdisp.m: - optimize the code - add a display for a MATLAB meta-method-data object.

# 2011-01-06 11:07 hewitson

\* tests/@ltpda\_test\_runner/run\_test\_list.m: Pass the runner to the test case to allow global user configuration to propagate.

# 2011-01-06 11:06 hewitson

\* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: We add flags that will allow the developer to configure the runner to run only particular tests. We also add a repository plist as global information which can be accessed in the individual test cases which want to use a repository.

## 2011-01-05 11:46 marc1

\* @ssm/: bode.m, bodecst.m: bode now works for symbolic models. We do a deep copy of the model and we compute the bode response of the "numerized" system. We do not change the state of the original model. For the calculation we use the value of the stored parameters.

# 2011-01-05 09:52 ingo

\* @ltpda\_uo/save.m: bug fix: Use the pwd-path only if the user doesn't specify any path. For example:

test.xml -> Use pwd-path /tmp/test.xml -> don't use the pwd-path

### 2011-01-04 20:04 ingo

\* tests/models/@ltpda\_builtin\_model\_utp/test\_builtin\_model\_info.m: It is necessary to clear the 'sets' and 'plists' if we want to compare minfo-objects inside the history.

### 2011-01-04 20:03 ingo

\* @minfo/copy.m: bug fix: it is also necessary to copy the new properties 'description' and 'children'

# 2011-01-04 19:23 ingo

\* @history/attachToDom.m, @history/fromDom.m, @minfo/attachToDom.m, @minfo/fromDom.m: Changes to the new property 'children' of an minfo-object.

#### 2011-01-04 19:21 ingo

\* @plist/attachToDom.m: correct code description

# 2011-01-04 19:20 ingo

\* tests/plotting/plotter/@test\_plotter\_plotter/test\_data.m: bug
fix.

#### 2011-01-04 19:16 ingo

\* @minfo/minfo.m: make setFromEncodedInfo and getEncodedString as hidden

### 2011-01-04 19:15 ingo

\* @minfo/setFromEncodedInfo.m: Decode the 'description' of an minfo-object.

### 2011-01-04 19:15 ingo

\* @minfo/getEncodedString.m: make some plausibility checks and add the description.

## 2011-01-04 19:14 ingo

\* @minfo/clearSets.m: Clear the 'sets' and 'plists' even from the children (recursively)

# 2011-01-04 19:13 ingo

\* @ltpda\_uo/save.m: Use our own XML-write because the MATLAB method (writexml) doesn't use an indent at least on my machine.

## 2011-01-04 13:37 marc1

 $\ast$  @ssm/bodecst.m: bodecst output only magnitude information and no phase was output. Now this is fixed

#### 2011-01-04 10:33 hewitson

\* @ao/iplot.m: Bug fix in setting the x-axis range on fsdata plots.

### 2010-12-23 13:13 ingo

\* @stattest/stattest.m: Change the access of the function fromStruct from 'private' to 'protected'

# 2010-12-22 20:09 ingo

\* @history/update\_struct.m: bug fix: Update the structure field 'proctime' only if the it doesn't exist.

2010-12-22 20:08 ingo

\* @ao/cov.m: bug fix: Propagate the property 'plotinfo'

2010-12-22 18:50 ingo

\* @unit/attachToDom.m: bug fix: Correct the regular expression.

2010-12-22 18:49 ingo

\* +utils/@xml/getObject.m: bug fix: Initialise 'objShape'

2010-12-22 17:40 ingo

\* @plist/eq.m: <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0//EN"
 "http://www.w3.org/TR/REC-html40/strict.dtd"> <html><head><meta
 name="qrichtext" content="1" /><style type="text/css"> p, li {
 white-space: pre-wrap; } </style></head><body style="
 font-family: 'Sans Serif'; font-size:9pt; font-weight:400;
 font-style:normal;"> Add
 additional output if the length of the 'params' objects are not
 the same.</body></html>

2010-12-22 17:15 ingo

\* @ao/: conv.m, join.m, linSubtract.m, lincom.m, lscov.m, lxspec.m, xcorr.m, xspec.m: bug fix: Propagate the property 'plotinfo'

2010-12-22 17:14 ingo

\* @pest/pest.m: Don't copy the smodel in the setter method for the models (set.models) because the loading of a MAT file will set a new UUID to the smodel and this is not what we want.

2010-12-22 17:11 ingo

\* @ssm/update\_struct.m: The fromStruc-methods sets always the version number '1.0' if the input structure doesn't have any toolbox version field ('tbxver');

2010-12-20 21:51 ingo

- \* @ssm/: fromStruct.m, ssm.m: new behaviour of this function: —
  This function sets only the properties which are defined in this class To set the other properties call the fromStruct function the super-class function.
  - change the access of 'fromStruct' from private to protected.

2010-12-20 21:42 ingo

\* @collection/display.m: Use a helper method to display the inside objects.

2010-12-20 21:41 ingo

\* @ao/ao.m, @ao/fromStruct.m, @cdata/cdata.m, @cdata/fromStruct.m,
 @collection/collection.m, @collection/fromStruct.m,
 @data2D/data2D.m, @data2D/fromStruct.m, @data3D/data3D.m,
 @data3D/fromStruct.m, @filterbank/filterbank.m,
 @filterbank/fromStruct.m, @fsdata/fromStruct.m, @fsdata/fsdata.m,
 @history/fromStruct.m, @history/history.m,
 @history/update\_struct.m, @ltpda\_data/fromStruct.m,
 @ltpda\_data/ltpda\_data.m, @ltpda\_filter/fromStruct.m,
 @ltpda\_filter/ltpda\_filter.m, @ltpda\_nuo/fromStruct.m,
 @ltpda\_nuo/ltpda\_nuo.m, @ltpda\_obj/fromStruct.m,
 @ltpda\_obj/ltpda\_obj.m, @ltpda\_tf/fromStruct.m,
 @ltpda\_uo/ltpda\_uo.m, @ltpda\_uo/fromStruct.m,
 @ltpda\_uo/ltpda\_uo.m, @ltpda\_uo/fromStruct.m,
 @ltpda\_uo/ltpda\_uo.m, @ltpda\_uoh/fromStruct.m,
 @ltpda\_uo/ltpda\_uo.m, @matrix/fromStruct.m,
 @ltpda\_uoh/ltpda\_uoh.m, @matrix/fromStruct.m, @matrix/matrix.m,

@mfir/fromStruct.m, @mfir/mfir.m, @miir/fromStruct.m, @miir/miir.m, @minfo/fromStruct.m, @minfo/minfo.m, @param/fromStruct.m, @param/param.m, @paramValue/fromStruct.m, @paramValue/paramValue.m, @parfrac/fromStruct.m, @parfrac/parfrac.m, @pest/fromStruct.m, @pest/pest.m, @plist/fromStruct.m, @plist/plist.m, @provenance/fromStruct.m, @provenance/provenance.m, @pz/fromStruct.m, @pz/pz.m, @pzmodel/fromStruct.m, @pzmodel/pzmodel.m, @rational/fromStruct.m, @rational/rational.m, @smodel/fromStruct.m, @smodel/smodel.m, @specwin/fromStruct.m, @specwin/specwin.m, @specwin/update\_struct.m, @ssm/ssm.m, @ssmblock/fromStruct.m, @ssmblock/ssmblock.m, @ssmport/fromStruct.m, @ssmport/ssmport.m, @time/fromStruct.m, @time/time.m, @timespan/fromStruct.m, @tsdata/fromStruct.m, @tsdata/tsdata.m, @unit/fromStruct.m, @unit/unit.m, @xydata/fromStruct.m, @xydata/xydata.m, @xyzdata/fromStruct.m, @xyzdata/xyzdata.m: new behaviour of this function: - This function sets only the properties which are defined in this class - To set the other properties call the fromStruct function the super-class function.

- change the access of 'fromStruct' from private to protected.

# 2010-12-20 21:35 ingo

\* +utils/@helper/: getClassFromStruct.m, getObjectFromStruct.m, helper.m: new helper methods for the fromStruct methods.

#### 2010-12-20 15:58 ingo

\* @ao/elementOp.m: [no log message]

### 2010-12-20 15:56 ingo

\* @ao/elementOp.m: I have add an additional condition for object compatibility by a mistake.

# 2010-12-20 13:52 hewitson

\* tests/@ltpda\_utp/getTestData.m: A useful static method which returns the testData or an empty object of the correct class.

## 2010-12-20 13:51 hewitson

\* tests/ao/@test\_ao\_ao/: test\_ao\_ao.m, test\_copy.m,
 test\_save\_load.m: test plan for the AO class.

## 2010-12-20 13:51 hewitson

\* tests/stattest/@test\_stattest\_stattest/: test\_copy.m,
 test\_save\_load.m, test\_stattest\_stattest.m: Test plan for the new
 stattest class.

## 2010-12-20 13:51 hewitson

\* tests/@ltpda\_uoh\_tests/: ltpda\_uoh\_tests.m,
 test\_history\_empty\_constructor.m, test\_history\_setName.m,
 test\_plotinfo.m, test\_procinfo.m, test\_setPlotinfo.m,
 test\_setProcinfo.m: Tests for all user-objects with history.

### 2010-12-20 13:50 hewitson

\* tests/@ltpda\_uo\_tests/: ltpda\_uo\_tests.m, test\_description.m,
 test\_name.m, test\_save\_load.m, test\_setDescription.m,
 test\_setName.m, test\_setUUID.m, test\_string.m, test\_uuid.m: Tests
 for all user objects.

### 2010-12-20 13:50 hewitson

\* tests/@ltpda\_obj\_tests/: ltpda\_obj\_tests.m, test\_char.m,
 test\_copy.m, test\_display.m: Tests for all ltpda objects.

#### 2010-12-20 13:50 hewitson

\* @stattest/: attachToDom.m, char.m, copy.m, display.m, fromData.m, fromDom.m, fromStruct.m, generateConstructorPlist.m, loadobj.m, setData.m, stattest.m, update\_struct.m: A prototype for a new class for storing statistical tests. There are no methods yet – just the basic container.

# 2010-12-20 13:49 hewitson

\* tests/ao/@test\_ao\_abs/test\_ao\_abs.m: When constructing this test plan we need to set the method name and class name so that the inherited methods will work.

#### 2010-12-20 13:48 hewitson

\* tests/ao/@test\_ao\_abs/test\_vector\_input.m: Fix typo.

#### 2010-12-20 13:48 hewitson

\* tests/ao/@ltpda\_vector\_utp/test\_vector\_input.m: We can define the full vector test independent of the class or method. Then the subclass can just set the data and, voila.

# 2010-12-20 13:47 hewitson

\* tests/ao/@ltpda\_vector\_utp/ltpda\_vector\_utp.m: Call the superclass constructor.

### 2010-12-20 13:47 hewitson

\* @smodel/generateConstructorPlist.m: Typo in help.

### 2010-12-20 13:47 hewitson

\* @ltpda\_uoh/: setPlotinfo.m, setProcinfo.m: When we set a plist to the procinfo or plotinfo, we should make a copy of it.

#### 2010-12-20 13:46 hewitson

\* @ltpda\_uo/copy.m: I think deep copied objects should get a new UUID.

## 2010-12-17 18:48 ingo

\* @timespan/: char.m, display.m, double.m, generateConstructorPlist.m, setEndT.m, setStartT.m: Starting to implement persistent default plists. The first call to a method builds the default plist. On subsequent calls, the plist is not built, but just returned. MATLAB stores the built plist in a workspace local to the function

# 2010-12-17 18:45 ingo

\* @ao/and.m, @ao/conv.m, @ao/det.m, @ao/eig.m, @ao/elementOp.m, @ao/eqmotion.m, @ao/evaluateModel.m, @ao/exp.m, @ao/export.m, @ao/fft.m, @ao/fftfilt.m, @ao/filtSubtract.m, @ao/filter.m, @ao/filtfilt.m, @ao/find.m, @ao/firwhiten.m, @ao/fixfs.m, @ao/fngen.m, @ao/fromProcinfo.m, @ao/fs.m, @ao/gapfilling.m, @ao/gapfillingoptim.m, @ao/ge.m, @ao/generateConstructorPlist.m, @ao/gnuplot.m, @ao/gt.m, @ao/heterodyne.m, @ao/hist.m, @ao/gnuplot.m, @ao/hypot.m, @ao/ifft.m, @ao/imag.m, @ao/integrate.m, @ao/interp.m, @ao/interpmissing.m, @ao/intersect.m, @ao/inv.m, @ao/interpmissing.m, @ao/intersect.m, @ao/inv.m, @ao/iplotyy.m, @ao/lcohere.m, @ao/lcohere.m, @ao/lisovfit.m, @ao/le.m, @ao/len.m, @ao/log10.m, @ao/lpsd.m, @ao/lt.m, @ao/ltfe.m, @ao/ltp\_ifo2acc.m, @ao/max.m, @ao/mcmc.m, @ao/md5.m, @ao/mdc1\_cont2act\_utn.m, @ao/mdc1\_ifo2acc\_fd.m, @ao/mdc1\_ifo2acc\_fd.m, @ao/mdc1\_ifo2acc\_fd.m, @ao/mdc1\_ifo2cont\_utn.m, @ao/mdc1\_ifo2control.m, @ao/mdc1\_x2acc.m, @ao/mean.m, @ao/median.m, @ao/mrdivide.m,

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@ao/mtimes.m, @ao/noisegen1D.m, @ao/noisegen2D.m, @ao/norm.m,
@ao/normdist.m, @ao/nsecs.m, @ao/offset.m, @ao/optSubtraction.m,
@ao/or.m, @ao/phase.m, @ao/plot.m, @ao/plus.m, @ao/polyfit.m,
@ao/power.m, @ao/psd.m, @ao/psdconf.m, @ao/pwelch.m,
@ao/quasiSweptSine.m, @ao/rdivide.m, @ao/real.m, @ao/removeVal.m,
@ao/resample.m, @ao/rms.m, @ao/rotate.m, @ao/round.m,
@ao/scale.m, @ao/scatterData.m, @ao/search.m, @ao/select.m,
@ao/setDx.m, @ao/setDy.m, @ao/setFs.m, @ao/setT0.m, @ao/setX.m,
@ao/setXY.m, @ao/setXunits.m, @ao/setY.m, @ao/setYunits.m,
@ao/setZ.m, @ao/sign.m, @ao/simplifyYunits.m, @ao/sin.m,
@ao/sineParams.m, @ao/smallvector_lincom.m, @ao/smallvectorfit.m,
@ao/smoother.m, @ao/sort.m, @ao/spectrogram.m,
@ao/spikecleaning.m, @ao/split.m, @ao/sqrt.m, @ao/std.m,
@ao/straightLineFit.m, @ao/sum.m, @ao/sumjoin.m, @ao/svd.m,
@ao/svd_fit.m, @ao/t0.m, @ao/table.m, @ao/tan.m, @ao/tdfit.m,
@ao/tfe.m, @ao/timeaverage.m, @ao/timedomainfit.m, @ao/times.m,
@ao/timeshift.m, @ao/transpose.m, @ao/uminus.m, @ao/unwrap.m,
@ao/upsample.m, @ao/validate.m, @ao/var.m, @ao/x.m, @ao/xfit.m,
@ao/xunits.m, @ao/y.m, @ao/yunits.m, @collection/addObjects.m,
@collection/char.m, @collection/display.m,
@collection/generateConstructorPlist.m,
@collection/getObjectAtIndex.m, @collection/getObjectsOfClass.m,
@collection/nobjs.m, @collection/removeObjectAtIndex.m,
@collection/setObjectAtIndex.m, @collection/setObjs.m,
@filterbank/addFilters.m, @filterbank/char.m,
@filterbank/display.m, @filterbank/generateConstructorPlist.m,
@filterbank/setIunits.m, @filterbank/setOunits.m,
@ltpda_filter/impresp.m, @ltpda_filter/setA.m,
@ltpda_filter/setHistout.m, @ltpda_obj/eq.m, @ltpda_obj/get.m,
@ltpda_obj/isprop.m, @ltpda_obj/ne.m, @ltpda_tf/resp.m,
@ltpda_tf/setIunits.m, @ltpda_tf/setOunits.m,
@ltpda_tf/simplifyUnits.m, @ltpda_uo/bsubmit.m,
@ltpda_uo/retrieve.m, @ltpda_uo/save.m,
@ltpda_uo/setDescription.m, @ltpda_uo/setMdlfile.m,
@ltpda_uo/setName.m, @ltpda_uo/setUUID.m, @ltpda_uo/submit.m,
@ltpda_uo/update.m, @ltpda_uoh/created.m, @ltpda_uoh/creator.m,
@ltpda_uoh/csvexport.m, @ltpda_uoh/index.m, @ltpda_uoh/rebuild.m,
@ltpda_uoh/report.m, @ltpda_uoh/setDescription.m,
@ltpda_uoh/setMdlfile.m, @ltpda_uoh/setName.m,
@ltpda_uoh/setPlotinfo.m, @ltpda_uoh/setProcinfo.m,
@ltpda_uoh/string.m, @ltpda_uoh/type.m, @ltpda_uoh/viewHistory.m,
@matrix/char.m, @matrix/conj.m, @matrix/crb.m,
@matrix/ctranspose.m, @matrix/det.m, @matrix/display.m,
@matrix/fft.m, @matrix/fftfilt.m, @matrix/filter.m,
@matrix/generateConstructorPlist.m, @matrix/getObjectAtIndex.m,
@matrix/inv.m, @matrix/linearize.m, @matrix/linfitsvd.m,
@matrix/linlsqsvd.m, @matrix/mchNoisegen.m,
@matrix/mchNoisegenFilter.m, @matrix/mcmc.m, @matrix/minus.m,
@matrix/mtimes.m, @matrix/ncols.m, @matrix/nrows.m,
@matrix/osize.m, @matrix/plus.m, @matrix/rdivide.m,
@matrix/rotate.m, @matrix/setObjs.m, @matrix/simplify.m,
@matrix/split.m, @matrix/times.m, @matrix/transpose.m,
@mfir/char.m, @mfir/display.m, @mfir/generateConstructorPlist.m,
@mfir/redesign.m, @mfir/setGd.m, @miir/char.m, @miir/display.m,
@miir/generateConstructorPlist.m, @miir/redesign.m, @miir/setB.m,
@miir/setHistin.m, @parfrac/char.m, @parfrac/display.m,
@parfrac/generateConstructorPlist.m, @parfrac/getlowerFreq.m,
@parfrac/getupperFreq.m, @pest/LTPimperf2physParams.m,
@pest/char.m, @pest/combineExps.m, @pest/display.m, @pest/eval.m,
@pest/find.m, @pest/generateConstructorPlist.m, @pest/setChain.m,
@pest/setChi2.m, @pest/setCorr.m, @pest/setCov.m, @pest/setDof.m,
@pest/setDy.m, @pest/setDyForParameter.m, @pest/setModels.m,
@pest/setNames.m, @pest/setPdf.m, @pest/setY.m,
@pest/setYforParameter.m, @pest/setYunits.m,
@pest/setYunitsForParameter.m, @pzmodel/char.m,
@pzmodel/display.m, @pzmodel/fngen.m,
@pzmodel/generateConstructorPlist.m, @pzmodel/getlowerFreq.m,
@pzmodel/getupperFreq.m, @pzmodel/rdivide.m, @pzmodel/setDelay.m,
@pzmodel/setGain.m, @pzmodel/setPoles.m, @pzmodel/setZeros.m,
@pzmodel/simplify.m, @pzmodel/times.m, @pzmodel/tomfir.m,
@pzmodel/tomiir.m, @rational/char.m, @rational/display.m,
@rational/generateConstructorPlist.m, @rational/getlowerFreq.m,
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@rational/getupperFreq.m, @smodel/char.m, @smodel/conj.m,
@smodel/convol\_integral.m, @smodel/det.m, @smodel/diff.m,
@smodel/display.m, @smodel/double.m, @smodel/eval.m,
@smodel/fitfunc.m, @smodel/fourier.m,
@smodel/generateConstructorPlist.m, @smodel/hessian.m,
@smodel/ifourier.m, @smodel/ilaplace.m, @smodel/inv.m,
@smodel/iztrans.m, @smodel/laplace.m, @smodel/linearize.m,
@smodel/minus.m, @smodel/mrdivide.m, @smodel/mtimes.m,
@smodel/op.m, @smodel/plus.m, @smodel/rdivide.m,
@smodel/setParams.m, @smodel/setTrans.m, @smodel/setValues.m,
@smodel/setXunits.m, @smodel/setXvals.m, @smodel/setXvar.m,
@smodel/setYunits.m, @smodel/simplify.m, @smodel/simplifyUnits.m,
@smodel/sop.m, @smodel/subs.m, @smodel/sum.m, @smodel/times.m,
@smodel/ztrans.m: Starting to implement persistent default
plists. The first call to a method builds the default plist. On
subsequent calls, the plist is not built, but just returned.
MATLAB stores the built plist in a workspace local to the
function

### 2010-12-17 16:33 hewitson

\* @ao/bin data.m, @ao/cat.m, @ao/complex.m, @ao/compute.m, @ao/conv.m, @ao/csvGenerateData.m, @ao/curvefit.m, @ao/dft.m, @ao/diag.m, @ao/dropduplicates.m, @ao/dsmean.m, @ao/dx.m,
@ao/iplot.m, @ao/join.m, @ao/mcmc\_td.m, @ao/whiten1D.m, @ao/abs.m, @ao/acos.m, @ao/and.m, @ao/angle.m, @ao/ao.m, @ao/atan2.m, @ao/bilinfit.m, @ao/char.m, @ao/cohere.m, @ao/confint.m, @ao/conj.m, @ao/consolidate.m, @ao/convert.m, @ao/cos.m, @ao/cpsd.m, @ao/crbound.m, @ao/ctranspose.m, @ao/delay.m, @ao/delayEstimate.m, @ao/demux.m, @ao/det.m, @ao/diff.m, @ao/display.m, @ao/dopplercorr.m, @ao/downsample.m, @ao/dy.m, @ao/linSubtract.m, @ao/linfit.m, @ao/linlsqsvd.m, @ao/lscov.m, @ao/sDomainFit.m, @ao/spsd.m, @ao/whiten2D.m, @ao/x.m, @ao/xcorr.m, @ao/xfit.m, @ao/xunits.m, @ao/y.m, @ao/yunits.m, @ao/zDomainFit.m, @ao/zeropad.m, @LTPDAprefs/loadPrefs.m, @ao/asin.m, @ao/atan.m, @ao/buildWhitener1D.m, @ao/corr.m, @ao/cov.m, @ao/detrend.m, @ao/getdof.m, @ao/polynomfit.m, @collection/collection.m, @filterbank/filterbank.m, @ltpda\_uo/ltpda\_uo.m, @ltpda\_uoh/ltpda\_uoh.m, @matrix/matrix.m, @mfir/mfir.m, @pest/pest.m, @plist/plist.m, @pzmodel/pzmodel.m, @rational/rational.m, @ssm/ssm.m, @miir/miir.m,
@parfrac/parfrac.m, @smodel/smodel.m, @timespan/timespan.m: Starting to implement persistent default plists. The first call to a method builds the default plist. On subsequent calls, the plist is not built, but just returned. MATLAB stores the built plist in a workspace local to the function.

# 2010-12-17 16:32 hewitson

\* @LTPDAHelper/: LTPDAHelper.m, cb\_guiClosed.m, generateFunctionList.m, uploadFunctions.m: Starting to build up a new helper tool to let users browse/search the LTPDA methods and build commands more easily. Far from finished.

### 2010-12-17 15:26 hewitson

\* @param/display.m: Since this is a non-user object we can make assumptions about the inputs and avoid the expensive collect\_objects call.

# 2010-12-17 15:23 hewitson

\* +utils/@helper/getHelpPath.m: We can make use of the new LTPDAROOT stored in the app data.

#### 2010-12-17 15:22 hewitson

\* +utils/@helper/: getPublicMethods.m, helper.m: Added a new method which returns the public methods of an ltpda class and an array of the info objects. This was factored out of some code from the workbench library builder. It can also then be called from there.

# 2010-12-17 15:21 hewitson

\* +utils/@helper/val2str.m: Some rearrangements and optimisations.

### 2010-12-17 15:21 hewitson

\* +utils/@helper/mat2str.m: Some rearranging of the logic to make
it faster.

#### 2010-12-17 15:20 hewitson

\* @minfo/tohtml.m: strcat is slow. Use [] instead. Also we use the new 'internal' call to plist/setName.

### 2010-12-17 15:19 hewitson

\* @plist/setName.m: Add an 'internal' call which is much faster and assumes a single input plist.

### 2010-12-17 15:18 hewitson

\* @param/getVal.m: Fixed the help.

### 2010-12-17 15:15 hewitson

\* @LTPDAworkbench/mpl2jpl.m: Rearrange the cases to make it faster. The most common go to the top.

#### 2010-12-17 07:45 mauro

\* @ao/melementOp.m: Allow multiplication of square matrices with same size

#### 2010-12-16 22:02 ingo

\* tests/@ltpda utp/ltpda utp.m: Add some properties to the class.

### 2010-12-16 22:01 ingo

\* @ltpda\_uo/getBuiltInModels.m: Put a try-catch command around the getting of the description of a model. It throws a warning if a model doesn't return a description.

# 2010-12-15 21:42 ingo

\* tests/models/:
 @ltpda\_builtin\_models\_ao\_utp/ltpda\_builtin\_models\_ao\_utp.m,
 @ltpda\_builtin\_models\_collection\_utp/ltpda\_builtin\_models\_collection\_utp.m,
 @ltpda\_builtin\_models\_matrix\_utp/ltpda\_builtin\_models\_matrix\_utp.m,
 @ltpda\_builtin\_models\_smodel\_utp/ltpda\_builtin\_models\_smodel\_utp.m,
 @ltpda\_builtin\_models\_ssm\_utp/ltpda\_builtin\_models\_ssm\_utp.m:
 Create for the model-classes AO, COLLECTION, MATRIX, SMODEL and
 SSM a own general test class.

### 2010-12-15 21:41 ingo

\* tests/models/@ltpda\_builtin\_model\_utp/:
 ltpda\_builtin\_model\_utp.m, test\_builtin\_model\_describe.m,
 test\_builtin\_model\_doc.m, test\_builtin\_model\_info.m,
 test\_builtin\_model\_modelOverview.m, test\_builtin\_model\_plist.m,
 test\_builtin\_model\_plist\_version.m, test\_builtin\_model\_version.m,
 test\_builtin\_model\_versions.m: move the class
 "ltpda\_builtin\_model\_utp" in a own sub-folder "models"

# 2010-12-13 11:29 ingo

\* @param/param.m: Add new additional conditions to our 'special' constructor for building a parameter with options.

# 2010-12-12 09:29 hewitson

\* +utils/@helper/ltpda\_classes.m, @aoplotter/aoplotter.m,
 @aoplotter/makeAxisLabel.m, @aoplotter/singlePlots.m,
 @plotter/char.m, @plotter/display.m, @plotter/plot.m,
 @plotter/plotter.m: Some more work on the new plotter classes.

#### 2010-12-12 09:27 hewitson

\* tests/plotting/:
aoplotter/@test\_aoplotter\_aoplotter/test\_aoplotter\_aoplotter.m,
aoplotter/@test\_aoplotter\_aoplotter/test\_data.m,
aoplotter/@test\_aoplotter\_singlePlots/test\_aoplotter\_singlePlots.m,
plotter/@test\_plotter\_plotter/test\_data.m,
plotter/@test\_plotter\_plotter/test\_plotter.m,
plotter/@test\_plotter\_plotter/test\_plotter.m: Some unit
tests for the new plotter classes.

### 2010-12-10 13:14 congedo

\* @pest/combineExps.m: pest method to combine the result of different experiments. compute joint covariance, chi2 and dof

#### 2010-12-08 16:46 hewitson

\* @plotter/char.m, @plotter/copy.m, @plotter/display.m, @plotter/loadobj.m, @plotter/update\_struct.m, @aoplotter/aoplotter.m, @plotter/plotter.m, @plotterFactory/plotterFactory.m, @tsplotter/tsplotter.m: Exploring the idea of plotter classes and subclasses together with a plotter factory for creating a suitable plotter. A plotter holds a set of objects which it can plot. It also will define various properties of the plots (figure, line, axis properties). The subclasses of plotter will handle more specialised plot commands. To build a plotter, you use the plotterFactory. See the test script for examples. This is still a very young idea.

#### 2010-12-07 18:14 luigi

\* @ao/: confint.m, getdof.m: bug fixed in the reading of a plist parameter

### 2010-12-06 20:14 luigi

\* +utils/@math/: Fcdf.m, Finv.m, SKcriticalvalues.m, ecdf.m,
math.m: some new utils functions for statistical testes

#### 2010-12-06 08:19 hewitson

\* @ltpda\_uo/fromModel.m: Bug fix. The static method moved but the call still refers to the subclass.

# 2010-12-04 16:09 hewitson

\* @ltpda\_uo/fromModel.m, @ltpda\_uo/ltpda\_uo.m,
 @ltpda\_uoh/fromModel.m: The adding of the history has to be done
in the subclass.

### 2010-12-03 18:14 ingo

\* @plist/plist.m: bug fix: copy past error

# 2010-12-03 18:13 ingo

\* @ao/ao.m, @collection/collection.m, @filterbank/filterbank.m, @matrix/matrix.m, @mfir/mfir.m, @miir/miir.m, @parfrac/parfrac.m, @pest/pest.m, @plist/plist.m, @pzmodel/pzmodel.m, @rational/rational.m, @smodel/smodel.m, @ssm/ssm.m, @timespan/timespan.m: Because of the move of the genera lstatic method 'getBuiltInModels' to the super class 'ltpda\_uo' it is necessary to adapt the local getBuiltInModels methods.

\* @plist/plist.m: Add 'built-in' model constructor

#### 2010-12-03 17:58 ingo

\* +utils/@models/getBuiltinModelSearchPaths.m: bug fix: We have changed the location of this method so that we have to adapt the LTPDA built-in path-.

### 2010-12-03 17:50 ingo

\* @ltpda\_uoh/ltpda\_uoh.m, @ltpda\_uoh/getBuiltInModels.m,
 @ltpda\_uo/getBuiltInModels.m, @ltpda\_uo/ltpda\_uo.m: Move the
 static methods for the models to the super-class ltpda\_uo

### 2010-12-03 17:20 ingo

\* @ltpda\_uoh/fromModel.m: This 'fromModel' calls the method of the super class and then adds the properties from the PLIST. This is not possible in the ltpda\_uo class because the setProperties method exist only in the ltpda\_uoh class.

#### 2010-12-03 17:18 ingo

\* @ltpda\_uo/fromModel.m: Moved this model from the ltpda\_uoh class
to the ltpda uo class

### 2010-12-03 17:17 ingo

\* @ltpda\_uo/ltpda\_uo.m: Add prototype of the 'fromModel' function

### 2010-12-03 16:36 ingo

#### 2010-12-03 16:34 ingo

\* @LTPDAprefs/LTPDAprefs.m: bug fix: I hope this was the last bug fix.

## 2010-12-03 16:05 ingo

\* @LTPDAprefs/LTPDAprefs.m: bug fix

# 2010-12-03 15:57 ingo

\* @LTPDAprefs/setPreference.m: bug fix: — It is necessary to convert the MATLAB values to the corresponding java values — I have changed a method name on the java side.

## 2010-12-03 15:46 ingo

\* @LTPDAprefs/setPreference.m: Set the new plot plotproperties:
legendFontSize -> Set the font size for the legend
includeDescription -> Set the description of an object to the
plot

### 2010-12-03 15:46 ingo

# 2010-12-03 14:10 hewitson

\* @ao/iplot.m: Use the axis font size from the preferences as the default for the legend font size. A new preference will be added soon to allow this font size to be controlled individually.

2010-12-03 11:20 hewitson

\* @minfo/tohtml.m: If the minfo has a description, display it.

## 2010-12-03 11:10 hewitson

\* +utils/@helper/displayMethodInfo.m: Support passing an minfo object directly.

#### 2010-12-03 11:00 hewitson

\* +utils/@helper/: installExtensionsForDir.m,
uninstallExtensionsForDir.m: Better to support packages so that
we can group functions in classes and avoid namespace problems.

#### 2010-12-03 10:18 hewitson

\* @LTPDAprefs/cb\_removeExtensionPath.m: Bug fix. The wrong variable name was used.

#### 2010-12-03 10:18 hewitson

\* +utils/@helper/: installExtensionsForDir.m,
uninstallExtensionsForDir.m: Now we support a 'functions'
directory in the extensions module:

<module>/functions.

These utilities add and remove this 'functions' directory and all subdirectories to/from the MATLAB path.

### 2010-12-02 13:03 luigi

\* @ao/confint.m: bug fixed in the calculation of the logscaled magnitude squared coherence confidence intervals if dof are 2 mscohere is practically undetermined -> upper limit is set to 1 lower to 0 in some cases the variable defining the lower bound become negative as this is not possible physically the values are set to 0

## 2010-12-01 19:16 ingo

\* @LTPDAprefs/LTPDAprefs.m: register the callback to the swing panel instead to our own class because the callbacks are working only for swing components.

# 2010-12-01 19:15 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: Remove the error because it is possible that the plot panel fires some other property-changed events. (For example when the ancestor changes)

### 2010-12-01 18:23 luigi

\* @ao/: confint.m, getdof.m: now the methods copes with processed spectral data, it is no more required to pass them the direct output of a spectral estimator The calculation of confidence levels for fit parameters was removed, it will be implemented in a proper method of the pest class

### 2010-12-01 18:17 ingo

\* @LTPDAworkbench/mpl2jpl.m: Bug fix: The problem was that it was not possible to build a executable one-line-string for objects with more than one history step. In this case we use now a PLIST which stores all important properties from the object. We use for this the method 'generateConstructorPlist'

# 2010-12-01 18:13 ingo

\* @ao/generateConstructorPlist.m,
@collection/generateConstructorPlist.m,
@filterbank/generateConstructorPlist.m, @ltpda\_uoh/ltpda\_uoh.m,

@matrix/generateConstructorPlist.m,
@mfir/generateConstructorPlist.m,
@miir/generateConstructorPlist.m,
@parfrac/generateConstructorPlist.m,
@pest/generateConstructorPlist.m,
@pzmodel/generateConstructorPlist.m,
@rational/generateConstructorPlist.m,
@smodel/generateConstructorPlist.m,
@ssm/generateConstructorPlist.m,
@timespan/generateConstructorPlist.m: Add a new method
'generateConstructorPlist' to all ltpda\_uoh classes. This method
creates from the important properties a PLIST which the user can
use to create a new object with the same properties.

### 2010-12-01 18:00 ingo

\* @mfir/: mfir.m, setGd.m: make the 'setGd' method as a public method

#### 2010-12-01 17:56 ingo

\* @msym/msym.m: add copy constructor.

# 2010-12-01 17:55 ingo

\* @smodel/fromExpression.m: bug fix: We have forgotten to set the 'name' from the PLISt.

### 2010-12-01 17:49 adrien

\* @ssm/doSubsParameters.m: Bug in precision. Was not substituting the correct value for the parameters. Now with 17 digits precision

### 2010-12-01 17:34 adrien

\* @ssm/parameterDiff.m: Removing a white space (how could it ever work?) and some memory management was improved

### 2010-11-30 18:42 ingo

\* @LTPDAprefs/cb\_guiClosed.m: 1. Delete the MATLAB LTPDAprefs object with the command: delete() 2. Checks first if the input object is valid for deleting the object from the memory.

# 2010-11-30 18:39 ingo

\* @LTPDAprefs/setApplicationData.m: New static method which sets (at the moment) the plot properties to the default-application data.

### 2010-11-30 18:38 ingo

\* @LTPDAprefs/LTPDAprefs.m: Source some functions out into their own m-files.

### 2010-11-30 18:37 ingo

\* @LTPDAprefs/: loadPrefs.m, upgradeFromPlist.m: Create own m-file for this static methods.

# 2010-11-30 18:35 ingo

\* @LTPDAworkbench/LTPDAworkbench.m: Add a try-catch command around the uploading of the models.

### 2010-11-30 18:34 ingo

\* @LTPDARepositoryManager/deleteTimer.m: Add an additional check (isvalid) before deleting the timer object.

# 2010-11-30 18:33 ingo

\* @ltpda\_uoh/string.m: bug fix for the case that the input object have no history.

### 2010-11-29 20:39 ingo

\* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: define the general methods of the 'handle' class as hidden.

#### 2010-11-29 20:37 ingo

\* @LTPDAprefs/LTPDAprefs.m: 1.) Add callback to the plot properties. 2.) Remove the outsourced code

### 2010-11-29 20:35 ingo

\* @LTPDAprefs/: getPreferences.m, setPreference.m: Create own m-files for private static methods.

# 2010-11-29 20:35 ingo

\* @LTPDAprefs/cb\_plotPrefsChanged.m: new callback method for the plot properties.

# 2010-11-29 20:34 ingo

\* @LTPDAprefs/: buildMainfig.m, buildPrefsPlist.m, getPrefsPlist.m:
 I hope this method are not longer used.

### 2010-11-29 20:34 ingo

\* @LTPDAprefs/: cb\_addExtensionPath.m, cb\_addModelPath.m,
cb\_guiClosed.m, cb\_removeExtensionPath.m, cb\_removeModelPath.m:
Create own m-files for the callback functions.

# 2010-11-29 15:46 hewitson

\* @ao/ifft\_core.m: Bug fix: here we were changing the units to 'arb', clearly the units should remain such that

b = ifft(fft(a)) b == a b.yunits == a.yunits

This partly addresses the issues in MANTIS issue 512.

### 2010-11-29 15:38 hewitson

\* @ao/join.m: Bug fix: the inputs to join were assumed to be in temporal order. Now we make it explicitely so by sorting the input AOs if they are time-series.

# 2010-11-29 15:22 hewitson

\* @ssm/simulate.m: Added a new parameter 't0' to replace 'tini' to be more uniform with the rest of the toolbox. The use of 'tini' issues a deprecation warning now.

Also, the default value is now empty, and if it is empty, then the output AOs get a t0 which is the clock time from the start of the simulation.

# 2010-11-26 14:50 luigi

\* @ao/mcmc\_td.m: mcmc for time domain log likelihood minimization
 with ssm

## 2010-11-26 14:48 luigi

\* +utils/@math/: loglikehood\_ssm\_td.m, math.m, mhsample\_td.m:
 metropolis sampler for time domain loglikelihood minimization
 with ssm

# 2010-11-25 15:10 adrien

\* @ao/spsd.m: More precise STD estimation on my samples.

### 2010-11-25 14:51 ingo

\* @ssmblock/ssmblock.m, @ssmport/ssmport.m: Add necessary constructor for reading MAT- and XML- files.

#### 2010-11-23 15:30 hewitson

\* @ssm/: modelHelper\_checkParameters.m, ssm.m: A new helper method for use in ssm models which checks the list of the parameter names the user wants to set against a list of names the model supports. At the moment it throws a warning, but it might make sense to throw an error here.

### 2010-11-22 17:53 luigi

\* @matrix/linfitsvd.m: a first step towards linear fits with ssm i)
previous behavior is preserved ii) fit with ssm still requires
further investigation

### 2010-11-22 13:47 ingo

\* +utils/@math/isequal.m: Adaptation to MATLAB behaviour: MATLAB's
"isequal" doesn't distinguish between logical AND double. for
example: isequal(0, logival(0))

### 2010-11-22 12:15 luigi

\* +utils/@math/: loglikehood\_ssm\_td.m, loglikehood\_td.m, math.m:
 definetily better behavior - now is performing better than the
 bare chi square (at least with the simple harmonic osillator
 example)

# 2010-11-19 13:40 ingo

\* +utils/@math/isequal.m: bug fix: It is necessary to check the size of the inputs first before we convert the values to double. It is also necessary to check if the inputs are numeric values. There exist in our toolbox some cases that we compare an empty array [] with a param-object. In this case uses the eq-method this isequal method and not the object-eq method because the first input is a DOUBLE [].

# 2010-11-19 13:37 ingo

\* @ltpda\_obj/eq.m: bug fix: I made a mistake. "if [0 1] ... end" doesn't check for all values in the vector only the first. I used this command for: "if size(obj1) ~= size(obj2)"

### 2010-11-18 11:34 hewitson

\* @plist/ltp\_parameters.m: Allow building the full parameter list (i.e. no input specified).

### 2010-11-17 15:58 ingo

\* @plist/eq.m: Now it is possible to add a tolerance for the check of numeric values.

# 2010-11-17 15:56 ingo

\* +utils/@math/isequal.m: new condition for the tolerance: Even if the user specified a tolerance and it is empty then uses the method the default tolerance.

# 2010-11-17 14:06 ingo

\* +utils/@math/isequal.m, @ltpda\_obj/eq.m: Correct my own code. I doesn't make sense that a utils.math.isequal method throw an error if the inputs doesn't have the same size. Even in this case

should the method return 'false' and not an error.

#### 2010-11-17 13:59 ingo

\* @ltpda\_obj/eq.m: - put a try-catch command around the
 'utils.math.isequal' method because this method throws an error.

#### 2010-11-17 13:58 ingo

\* +utils/@math/isequal.m: bug fix: The MATLAB command rethrow expects an MException object or an MException struct --> using the error command instead.

### 2010-11-16 18:14 ingo

\* +utils/@math/isequal.m: 1) Add a check for the same size of the inputs 2) Convert the input values to doubles.

#### 2010-11-16 18:13 ingo

\* @ltpda\_obj/eq.m: Now it is possible to specify a tolerance for numeric values.

# 2010-11-16 17:41 luigi

\* +utils/@math/: Rcovmat.m, chisquare\_ssm\_td.m, corr2cov.m,
 cov2corr.m, loglikehood\_ssm\_td.m, loglikehood\_td.m, math.m,
 xCovmat.m: A first attempt to write a maximum likelihood
 estimator in time domain for the ssm - not satisfactory at the
 moment

## 2010-11-16 13:42 ingo

\* @plist/remove.m: Add some description for the new feature.

## 2010-11-16 13:37 ingo

\* @plist/remove.m: Add t he feature to remove multiple 'keys' from a PLIST.

### 2010-11-16 12:22 hewitson

\* @plist/eq.m: Use utils.math.isequal when comparing numeric matrices so that we can use a tolerance.

#### 2010-11-16 12:22 hewitson

- \* @ltpda\_obj/eq.m: 1) Use utils.math.isequal when comparing numeric matrices so that we can use a tolerance.
  - 2) Moved the display output inside the loop over the objects.

# 2010-11-16 12:21 hewitson

\* +utils/@math/isequal.m: Handle matrices containing NaNs.

# 2010-11-16 09:12 hewitson

\* @ao/iplot.m: Bug fix: scaling the y axis for spectra plots now works if there are multiple traces being plotted. Before the fix we were only setting the y range according to the last data series plotted. Now the previous data series are accounted for.

### 2010-11-16 09:07 hewitson

\* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: New method to count the failed tests.

#### 2010-11-16 09:07 hewitson

\* tests/@ut\_result\_printer/ut\_result\_printer.m: Bug fix: check that the runner contains results before trying to access them.

### 2010-11-15 11:40 mauro

\* +utils/+const/@physics/physics.m: I somehow prefer this
definition.

#### 2010-11-12 13:07 hewitson

\* +utils/@models/processModelInputs.m: A simplified version, which also works properly, unlike the last version.

#### 2010-11-12 09:39 hewitson

\* @plist/getParamValueForParam.m: A new plist method to retrieve the paramValue object for a particular key. This is useful when rebuilding a plist with different keys but using parameter values from other plists.

#### 2010-11-12 09:10 hewitson

\* @ssm/ssm.m: Don't add the history after the call to fromModel, because the history is handled in that function.

## 2010-11-10 10:44 luigi

\* @ao/lscov.m: added the chi2 in the proper field of the output pest object

#### 2010-11-10 10:44 luigi

\* @ao/linlsqsvd.m: some more improvements to match the behavior of lscov with the output pest

### 2010-11-10 09:58 luigi

\* +utils/@math/linlsqsvd.m, +utils/@math/math.m, @ao/linlsqsvd.m, @matrix/linfitsvd.m, @matrix/linlsqsvd.m: A little restructuring of the linfitsvd method Now it wraps linlsqsvd which is a new method for matrix and ao with the same syntax of ao/lscov An utils/math function with the name linlsqsvd is also created which performs the core calculations for both aos and matrices

## 2010-11-05 11:13 marc1

\* @matrix/mcmc.m: added option to disable mcmc sampling and enabling the possibliity of doing only a simplex search. It does not break previous scripts because the default behaviour remains the same.

# 2010-11-04 16:56 hewitson

\* +utils/@models/processModelInputs.m: Make sure the user plist is dominating the output plist. This can probably be optimised.

## 2010-11-04 09:41 hewitson

\* @ssm/: modelHelper\_processInputPlist.m, ssm.m: A new static helper method to process input plists. This takes over a small part of the modelHelper\_introScript, most of which is not needed in the new model templates.

## 2010-11-04 09:29 hewitson

\* @ssm/modelHelper\_declareParameters.m: Support string input for 'symbolic params' and 'param names'

#### 2010-11-04 08:39 hewitson

\* @ssm/modelHelper\_declareParameters.m: Add semicolons to suppress dumping of plist to terminal.

# 2010-11-04 08:32 hewitson

\* @ltpda\_uoh/fromModel.m: Fixed typo in the error message.

### 2010-11-04 08:32 hewitson

\* @ssm/ssm.m: Remove the restriction on the model name being upper case.

#### 2010-11-03 11:17 mauro

\* @ao/iplot.m: Bug fixed in time format label

#### 2010-11-03 10:56 mauro

\* @ao/: linfit.m, polynomfit.m: Allowing dx to be included in th input objects, without being swept away from the plist (empty by default) values

### 2010-10-29 18:11 ingo

\* +utils/: @helper/displayMethodInfo.m,
 @models/displayModelOverview.m: create the dynamic help files in
 the MATLAB preferences path. On Linux it is: ~/.matlab/R2010b/

# 2010-10-29 18:09 ingo

\* @ao/: fromComplexDatafile.m, fromDataInMAT.m, fromDatafile.m, fromFSfcn.m, fromFcn.m, fromGEOserver.m, fromNDS.m, fromPolyval.m, fromPzmodel.m, fromSpecWin.m, fromStruct.m, fromVals.m, fromWaveform.m, fromXYFcn.m, fromXYVals.m: remove the "HISTORY: " from the header

### 2010-10-29 18:09 ingo

\* @collection/addObjects.m, @collection/char.m, @collection/collection.m, @collection/display.m, @collection/fromRepository.m, @collection/fromStruct.m, @collection/getObjectAtIndex.m, @collection/getObjectsOfClass.m, @collection/nobjs.m, @collection/removeObjectAtIndex.m, @collection/setObjectAtIndex.m, @collection/setObjs.m, @filterbank/addFilters.m, @filterbank/char.m, @filterbank/display.m, @filterbank/filterbank.m, @filterbank/fromFilters.m, @filterbank/fromStruct.m, @filterbank/resp.m, @filterbank/setIunits.m, @filterbank/setOunits.m, @ltpda\_filter/impresp.m,
@ltpda\_filter/setHistout.m, @ltpda\_tf/resp.m, @ltpda\_tf/setIunits.m, @ltpda\_tf/setOunits.m,
@ltpda\_tf/simplifyUnits.m, @matrix/char.m, @matrix/conj.m, @matrix/crb.m, @matrix/ctranspose.m, @matrix/det.m, @matrix/display.m, @matrix/fft.m, @matrix/fftfilt.m, @matrix/filter.m, @matrix/fromCSD.m, @matrix/fromStruct.m, @matrix/getObjectAtIndex.m, @matrix/inv.m, @matrix/linearize.m, @matrix/linfitsvd.m, @matrix/matrix.m, @matrix/mchNoisegen.m, @matrix/mchNoisegenFilter.m, @matrix/mcmc.m, @matrix/MultiChannelNoise.m, @matrix/minus.m, @matrix/mtimes.m, @matrix/ncols.m, @matrix/nrows.m, @matrix/osize.m, @matrix/plus.m, @matrix/rdivide.m, @matrix/rotate.m,
@matrix/setObjs.m, @matrix/simplify.m, @matrix/split.m, @matrix/times.m, @matrix/transpose.m, @mfir/char.m, @mfir/display.m, @mfir/fromA.m, @mfir/fromAO.m, @mfir/fromPzmodel.m, @mfir/fromStandard.m, @mfir/fromStruct.m, @mfir/mfir.m, @mfir/mkbandpass.m, @mfir/mkbandreject.m, @mfir/mkhighpass.m, @mfir/mklowpass.m, @mfir/parseFilterParams.m, @mfir/redesign.m, @miir/char.m, @miir/display.m, @miir/fromAB.m, @miir/fromAllpass.m, @miir/fromLISO.m, @miir/fromParfrac.m, @miir/fromPzmodel.m, @miir/fromStandard.m, @miir/fromStruct.m, @miir/miir.m, @miir/mkallpass.m, @miir/mkbandpass.m, @miir/mkbandreject.m, @miir/mkhighpass.m, @miir/mklowpass.m, @miir/parseFilterParams.m, @miir/redesign.m, @miir/setB.m, @miir/setHistin.m, @parfrac/char.m, @parfrac/display.m, @parfrac/fromPzmodel.m, @parfrac/fromRational.m, @parfrac/fromResidualsPolesDirect.m, @parfrac/fromStruct.m,

@parfrac/getlowerFreq.m, @parfrac/getupperFreq.m, @parfrac/parfrac.m, @pest/LTPimperf2physParams.m, @pest/char.m, @pest/display.m, @pest/eval.m, @pest/find.m, @pest/pest.m, @pest/setChain.m, @pest/setChi2.m, @pest/setCorr.m, @pest/setCov.m, @pest/setDof.m, @pest/setDy.m, @pest/setDyForParameter.m, @pest/setModels.m, @pest/setNames.m,
@pest/setPdf.m, @pest/setY.m, @pest/setYforParameter.m, @pest/setYunitsForParameter.m, @pest/setYunits.m, @pest/toA0.m, @pzmodel/abcascade.m, @pzmodel/char.m, @pzmodel/display.m,
@pzmodel/fngen.m, @pzmodel/fromLISO.m, @pzmodel/fromParfrac.m,
@pzmodel/fromPolesAndZeros.m, @pzmodel/fromRational.m,
@pzmodel/fromStruct.m, @pzmodel/getlowerFreq.m, @pzmodel/getupperFreq.m, @pzmodel/mrdivide.m, @pzmodel/mtimes.m, @pzmodel/pzmodel.m, @pzmodel/rdivide.m, @pzmodel/setDelay.m, @pzmodel/setGain.m, @pzmodel/setPoles.m, @pzmodel/setZeros.m, @pzmodel/simplify.m, @pzmodel/times.m, @pzmodel/tomfir.m, @pzmodel/tomiir.m, @rational/char.m, @rational/display.m, @rational/fromCoefficients.m, @rational/fromParfrac.m, @rational/fromPzmodel.m, @rational/fromStruct.m, @rational/getlowerFreq.m, @rational/getupperFreq.m, @rational/rational.m: workaround for the broken help links (header) in MATLAB 2010b.

#### 2010-10-29 14:47 ingo

\* @cdata/cdata.m, @fsdata/fsdata.m, @history/history.m,
 @ltpda\_data/ltpda\_data.m, @ltpda\_filter/ltpda\_filter.m,
 @ltpda\_tf/ltpda\_tf.m, @param/param.m, @paramValue/paramValue.m,
 @provenance/provenance.m, @pz/pz.m, @specwin/specwin.m,
 @tsdata/tsdata.m, @xydata/xydata.m, @xyzdata/xyzdata.m: remove
 the "M-INFO:" part from the help header.

### 2010-10-29 14:45 ingo

\* @minfo/tohtml.m: necessary for the broken help link workaround. We don't use any longer the help browser software/m-toolbox/classes/@minfo/tohtml.m we have to remove the 'txt://' at the begin of the HTML page.

### 2010-10-29 14:43 ingo

\* @ltpda\_nuo/ltpda\_nuo.m, @ltpda\_obj/eq.m, @ltpda\_obj/get.m, @ltpda\_obj/isprop.m, @ltpda\_obj/ltpda\_obj.m, @ltpda\_obj/ne.m, @ltpda\_uo/bsubmit.m, @ltpda\_uo/save.m, @ltpda\_uo/setDescription.m, @ltpda\_uo/setMdlfile.m, @ltpda\_uo/setName.m, @ltpda\_uo/submit.m, @ltpda\_uo/update.m, @ltpda\_uoh/addHistory.m, @ltpda\_uoh/created.m, @ltpda\_uoh/creator.m, @ltpda\_uoh/csvexport.m, @ltpda\_uoh/fromComplexDatafile.m, @ltpda\_uoh/fromDataInMAT.m, @ltpda\_uoh/fromDatafile.m, @ltpda\_uoh/fromFile.m, @ltpda\_uoh/fromLISO.m, @ltpda\_uoh/index.m, @ltpda\_uoh/rebuild.m, @ltpda\_uoh/report.m, @ltpda\_uoh/setDescription.m, @ltpda\_uoh/setHist.m, @ltpda\_uoh/setMdlfile.m, @ltpda\_uoh/setName.m, @ltpda\_uoh/setPlotinfo.m, @ltpda\_uoh/setProcinfo.m, @ltpda\_uoh/string.m, @ltpda\_uoh/type.m, @ltpda\_uoh/viewHistory.m, @plist/append.m, @plist/char.m, @plist/combine.m, @plist/display.m, @plist/eq.m, @plist/find.m, @plist/fromFile.m, @plist/fromRepository.m, @plist/fromStruct.m, @plist/getDescriptionForParam.m, @plist/getIndexForKey.m, @plist/getKeys.m, @plist/getOptionsForParam.m, @plist/getSelectionForParam.m, @plist/getSetRandState.m, @plist/isparam.m, @plist/ltp\_parameters.m, @plist/merge.m, @plist/mfind.m, @plist/nparams.m, @plist/parse.m, @plist/plist.m, @plist/plist2cmds.m, @plist/pset.m, @plist/remove.m, @plist/removeKeys.m, @plist/setCreated.m, @plist/setCreator.m,
@plist/setDefaultForParam.m, @plist/setDescriptionForParam.m,
@plist/setName.m, @plist/setOptionsForParam.m, @plist/setSelectionForParam.m, @plist/shouldIgnore.m, @plist/string.m, @plist/subset.m, @smodel/char.m, @smodel/conj.m, @smodel/convol\_integral.m, @smodel/det.m, @smodel/diff.m, @smodel/display.m, @smodel/double.m, @smodel/eval.m, @smodel/fitfunc.m, @smodel/fourier.m, @smodel/fromExpression.m,

@smodel/fromStruct.m, @smodel/ifourier.m, @smodel/ilaplace.m,
@smodel/inv.m, @smodel/iztrans.m, @smodel/laplace.m, @smodel/linearize.m, @smodel/minus.m, @smodel/mrdivide.m, @smodel/mtimes.m, @smodel/op.m, @smodel/plus.m, @smodel/rdivide.m, @smodel/setParams.m, @smodel/setTrans.m, @smodel/setValues.m, @smodel/setXunits.m, @smodel/setXvals.m, @smodel/setXvar.m, @smodel/setYunits.m, @smodel/simplify.m, @smodel/simplifyUnits.m, @smodel/smodel.m, @smodel/sop.m, @smodel/subs.m, @smodel/sum.m, @smodel/times.m, @smodel/ztrans.m, @ssm/CPSD.m, @ssm/addParameters.m, @ssm/append.m, @ssm/assemble.m, @ssm/blockMatPrune.m, @ssm/bode.m, @ssm/bodecst.m, @ssm/buildParamPlist.m, @ssm/char.m, @ssm/PSD.m, @ssm/display.m, @ssm/displayProperties.m, @ssm/dotview.m, @ssm/double.m, @ssm/duplicateInput.m, @ssm/findParameters.m, @ssm/getMatrixSelection.m, @ssm/getParameters.m, @ssm/getParams.m, @ssm/isStable.m, @ssm/kalman.m, @ssm/keepParameters.m, @ssm/modifyTimeStep.m, @ssm/noiseSpectrum.m, @ssm/parameterDiff.m, @ssm/reorganize.m, @ssm/resp.m, @ssm/respcst.m, @ssm/sMinReal.m, @ssm/setBlockDescriptions.m, @ssm/setBlockNames.m, @ssm/setBlockProperties.m, @ssm/setParameters.m, @ssm/setParams.m, @ssm/setPortDescriptions.m, @ssm/setPortNames.m, @ssm/setPortProperties.m,
@ssm/setPortUnits.m, @ssm/settlingTime.m, @ssm/simplify.m, @ssm/simulate.m, @ssm/ssm.m, @ssm/ssm2dot.m, @ssm/ssm2miir.m, @ssm/ssm2pzmodel.m, @ssm/ssm2rational.m, @ssm/ssm2ss.m, @ssm/ssmFromDescription.m, @ssm/ssmFromss.m, @ssm/steadyState.m, @ssm/subsParameters.m, @ssm/update\_struct.m, @timespan/char.m, @timespan/display.m, @timespan/double.m, @timespan/fromStruct.m, @timespan/fromTimespanDef.m, @timespan/setEndT.m, @timespan/setStartT.m, @timespan/timespan.m: workaround for the broken help links in MATLAB 2010b.

# 2010-10-29 14:40 ingo

\* +utils/: @helper/err.m, @helper/warn.m,
 @jmysql/getRepositoryVersion.m, @jmysql/getUserID.m,
 @jmysql/getXdoc.m, @jmysql/insert.m, @math/blwhitenoise.m,
 @math/csd2tf2.m, @math/getdc.m, @math/getinitstate.m,
 @math/getk.m, @math/isequal.m, @math/linfitsvd.m, @math/pf2ss.m,
 @math/pfallps2.m, @math/pfallpsyms2.m, @math/pfallpsymz2.m,
 @math/pfallpz2.m: change cvs type from -ko to -kkv

### 2010-10-29 14:09 hewitson

\* @LTPDAprefs/LTPDAprefs.m: Add callback handlers for the add/remove extension directories.

# 2010-10-29 14:08 hewitson

\* +utils/@helper/: getExtensionDirs.m, helper.m,
installExtensions.m, installExtensionsForDir.m,
uninstallExtensions.m, uninstallExtensionsForDir.m: New helper
functions for handling the new extensions scheme.

### 2010-10-28 18:04 congedo

\* @smodel/hessian.m: added plist for select the parameters to differentiate

### 2010-10-28 17:50 ingo

\* @ao/: abs.m, acos.m, and.m, angle.m, ao.m, asin.m, atan.m, atan2.m, bilinfit.m, bin\_data.m, buildWhitener1D.m, cat.m, char.m, cohere.m, complex.m, compute.m, confint.m, conj.m, consolidate.m, conv.m, convert.m, corr.m, cos.m, cov.m, cpsd.m, crbound.m, ctranspose.m, curvefit.m, delay.m, delayEstimate.m, demux.m, det.m, detrend.m, dft.m, diag.m, diff.m, display.m, dopplercorr.m, downsample.m, dropduplicates.m, dsmean.m, dx.m, dy.m, eig.m, eqmotion.m, evaluateModel.m, exp.m, export.m, fft.m, fftfilt.m, filtSubtract.m, filter.m, filtfilt.m, find.m, firwhiten.m, fixfs.m, fngen.m, fromProcinfo.m, fs.m,

gapfilling.m, gapfillingoptim.m, ge.m, getdof.m, gnuplot.m, gt.m, heterodyne.m, hist.m, hypot.m, ifft.m, imag.m, integrate.m, interp.m, interpmissing.m, intersect.m, inv.m, iplot.m, iplotyy.m, join.m, lcohere.m, lcpsd.m, le.m, len.m,
linSubtract.m, lincom.m, linedetect.m, linfit.m, lisovfit.m,
ln.m, log.m, log10.m, lpsd.m, lscov.m, lt.m, ltfe.m,
ltp\_ifo2acc.m, max.m, mcmc.m, md5.m, mdc1\_cont2act\_utn.m, mdc1\_ifo2acc\_fd.m, mdc1\_ifo2acc\_fd\_utn.m, mdc1\_ifo2acc\_inloop.m, mdc1\_ifo2cont\_utn.m, mdc1\_ifo2control.m, mdc1\_x2acc.m, mean.m, median.m, min.m, minus.m, mode.m, mpower.m, mrdivide.m, mtimes.m, noisegen1D.m, noisegen2D.m, norm.m, normdist.m, nsecs.m, offset.m, optSubtraction.m, or.m, phase.m, plus.m, polyfit.m, polynomfit.m, power.m, psd.m, psdconf.m, quasiSweptSine.m, rdivide.m, real.m, removeVal.m, resample.m, rms.m, rotate.m, round.m, sDomainFit.m, scale.m, scatterData.m, search.m, select.m, setDx.m, setDy.m, setFs.m, setT0.m, setX.m, setXY.m, setXunits.m, setY.m, setYunits.m, setZ.m, sign.m, simplifyYunits.m, sin.m, sineParams.m, smallvector\_lincom.m, smallvectorfit.m, smoother.m, sort.m, spectrogram.m,
spikecleaning.m, split.m, spsd.m, sqrt.m, std.m, straightLineFit.m, sum.m, sumjoin.m, svd.m, svd\_fit.m, t0.m, table.m, tan.m, tdfit.m, tfe.m, timeaverage.m, timedomainfit.m, times.m, timeshift.m, transpose.m, uminus.m, unwrap.m, upsample.m, validate.m, var.m, whiten1D.m, whiten2D.m, x.m, xcorr.m, xfit.m, xunits.m, y.m, yunits.m, zDomainFit.m, zeropad.m: workaround for the broken help links in MATLAB 2010b.

#### 2010-10-28 16:43 adrien

\* @ssm/modelHelper\_introScript.m: "SET" is a forbidden numerical parameter. Therfore it is not necessary to try substitute it and throw an erronated warning to the user.

# 2010-10-28 16:35 adrien

\* @ao/spsd.m: Now tested PSD estimator STD, true within a factor <2

### 2010-10-28 16:34 adrien

\* @ao/optSubtraction.m: Now faster way of scaling the criterion, and output hessian/criterion are not normalized anymore so no ambiguity lies in the detrmination of the fisher matrix.

# 2010-10-28 15:47 congedo

\* @smodel/hessian.m: new method for computing the hessian matrix for a given symbolic model.

# 2010-10-28 15:39 ingo

\* +utils/@helper/: helper.m, displayMethodInfo.m: new helper method which displays the method info in a the MATLAB browser.

### 2010-10-28 15:16 ingo

\* @minfo/modelOverview.m: Open the sub-model help page in a new MATLAB browser and not in the help browser

#### 2010-10-28 15:04 ingo

\* +utils/@models/displayModelOverview.m: new method

### 2010-10-28 15:04 ingo

\* +utils/@models/models.m: Add new prototype 'displayModelOverview'

### 2010-10-28 15:03 ingo

\* @minfo/modelOverview.m: We don't need any more at the begin of the HTML page the 'text://' because this is only necessary for the help-browser. Now we use the 'normal' MATLAB browser and not the help-browser.

# 2010-10-27 18:29 ingo

\* @rational/rational.m: Add new constructor: rational(num, den, iunits, ounits)

### 2010-10-27 18:26 ingo

\* @ao/table.m: bug fix: throw an error for AOs with xyz-data objects.

#### 2010-10-27 18:25 ingo

\* @rational/rational.m: Throw an error for a not valid four argument constructor.

### 2010-10-27 14:53 luigi

\* @matrix/linfitsvd.m: added a tolerance parameter — check the convergence of the fit parameters fit parameters are supposed to go to zero. As soon as their value become smaller than the error then we claim for convergence. Default value for the parameter is 1 The check on the chi2 convergence is removed because is redundant

# 2010-10-27 10:55 congedo

\* @pest/LTPimperf2physParams.m: Modified to output the difference of stiffness, as this is the the actual measured physical parameter. The second stiffness is anyway contained in the procinfo.

#### 2010-10-26 15:17 hewitson

\* tests/@ut\_result\_printer/printSummaryString.m: Fix typo in function name.

### 2010-10-26 15:16 hewitson

\* tests/@ut\_result\_printer/ut\_result\_printer.m: Don't want these methods to be private.

## 2010-10-26 14:18 hewitson

\* tests/@ut\_result\_printer/printRuntimeString.m: Bug fix: we want the runtime of all tests.

## 2010-10-26 13:02 hewitson

\* tests/@ltpda\_test\_runner/run\_test\_list.m: Bug fix: the runtime was not being recorded properly.

## 2010-10-26 11:45 miquel

\* @matrix/mcmc.m: adding values to default plist

### 2010-10-26 11:22 hewitson

\* +utils/@models/processModelInputs.m: Oops. Combined the plists the wrong way around. Silly me.

# 2010-10-26 11:05 luigi

\* @matrix/linfitsvd.m: bug fixed, it was caused by the changes of yesterday. A wrong value for the chi2 was recorded

#### 2010-10-26 09:42 hewitson

\* +utils/@models/processModelInputs.m: Bug fix: We need to combine the plist of the model version the user actually requests. If the user requests no specific version, the default version (first in the version table) is used.

# 2010-10-25 17:32 luigi

\* @matrix/linfitsvd.m: changed convergence criteria to stop fit iteration

#### 2010-10-25 08:40 hewitson

\* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: 1) Don't hide this class 2) Add some help comments 3) Allow inputs to the static RUN TESTS method.

### 2010-10-23 13:14 hewitson

\* @LTPDAModelBrowser/LTPDAModelBrowser.m: Controller class for the new built-in model browser.

LTPDAModelBrowser

This only works with the new type of models.

#### 2010-10-23 12:38 hewitson

\* @minfo/modelOverview.m: Add some hooks to allow the output to be used in the new model browser (coming soon).

### 2010-10-23 12:37 hewitson

\* @smodel/double.m: I don't see any reason that 'values' can't be empty. It's perfectly reasonable to have a model which contains no variables.

### 2010-10-22 18:04 congedo

\* @ao/xfit.m: bugs fixed

### 2010-10-22 10:49 marc1

 $\ast$  @ssm/ssm.m: bug fixed

### 2010-10-21 14:37 marc1

\* @ssm/ssm.m: Checking if withparams is used in the ssm constructor in the 'built-in' case. An error is raised if so.

### 2010-10-21 12:38 marc1

\* @ssm/: modelHelper\_declareParameters.m,
modelHelper\_introScript.m, ssm.m: Changes on the key to handle
parametric models: Changes: the key 'withparams' is substituted
with 'symbolic params' the key 'setnames' is substituted with
'param names' the key 'setvalues' is substituted with 'param
values'

## 2010-10-21 12:16 luigi

\* +utils/@math/linfitsvd.m, +utils/@math/math.m,
 @matrix/linfitsvd.m: updated. A new output keep trace of the
 number of independent combinations of parameters for each input
 measurement

# 2010-10-20 17:54 luigi

\* +utils/@math/linfitsvd.m, +utils/@math/math.m,
 @matrix/linfitsvd.m: added the dof of the chi square to the
 output

# 2010-10-20 17:20 luigi

\* +utils/@math/linfitsvd.m, @matrix/linfitsvd.m: changed a
 threshold ensuring fit accuracy 10 -> 1 now it fit also 10
 parameters for the stoc ex6

### 2010-10-19 20:39 congedo

\* @pest/LTPimperf2physParams.m: small typo.

### 2010-10-19 20:37 congedo

\* @pest/LTPimperf2physParams.m: this pest method converts fit imperfections to actual physical parameters, provided the two nominal stiffnesses.

### 2010-10-14 14:29 luigi

\* +utils/@math/csd2tf2.m: bug fixed in the 1D case

# 2010-10-11 15:43 ingo

\* @LTPDAprefs/: cb\_applyPrefs.m, cb\_cancel.m, cb\_categorySelect.m, cb\_dirAdd.m, cb\_dirRmv.m, cb\_fileSelect.m, cb\_mainfigClose.m, cb\_ok.m, cb\_repoAdd.m, cb\_repoRmv.m, cb\_saveStateFalse.m, cb\_unitAdd.m, cb\_unitRmv.m: Remove the not longer used callback functions for the LTPDA preferences GUI.

#### 2010-10-11 10:16 mauro

\* @cdata/applyoperator.m: Added uncertainty calculation in the case of operator = 'power' (I actually have no idea of other cases this is used for) Removed unused case

#### 2010-10-11 10:15 mauro

\* @data2D/applyoperator.m: Added uncertainty calculation in the case of operator = 'power' (I actually have no idea of other cases this is used for)

#### 2010-10-08 10:14 hewitson

\* @ltpda\_uoh/fromModel.m: Only print out the list according to the users verbosity level.

### 2010-10-08 09:28 hewitson

\* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: Added a method to dump the results from the runner. Also added conventient static methods which run the different test configurations and print the results to the terminal.

## 2010-10-08 09:27 hewitson

\* tests/@ut\_result\_printer/: dump.m, printFailuresString.m,
printRuntimeString.m, printSummaryString.m, ut\_result\_printer.m:
Factoring out the code for printing and displaying now failures
and runtimes.

## 2010-10-08 09:01 hewitson

\* tests/@ltpda\_test\_runner/run\_tests.m: Completed the last user
 option:

runner.run\_tests(<test\_class>, {...methods...})

### 2010-10-08 08:53 hewitson

\* tests/@ut\_result\_printer/ut\_result\_printer.m: Added
documentation.

#### 2010-10-08 08:52 hewitson

\* tests/@ltpda\_utp/ltpda\_utp.m: Cleaned up documentation. Added a new property to hold a configuration plist.

# 2010-10-08 08:51 hewitson

- \* tests/@ltpda\_test\_runner/ltpda\_test\_runner.m: 1) cleaned up documentation
  - 2) declare many of the methods as protected
  - 3) expose a static method to run all tests under current directory ltpda\_test\_runner.RUN\_TESTS

#### 2010-10-08 08:50 hewitson

- \* tests/@ltpda\_test\_runner/run\_tests.m: Added documentation. The user interface is now:
  - % runner.run\_tests() % all tests under the current directory %
    runner.run\_tests('all') % all % runner.run\_tests('models') %
    only models % runner.run\_tests('classes') % only models %
    runner.run\_tests(<test\_class>) % all tests in test class %
    runner.run\_tests(<test\_class>, {... methods ...}) % only
    particular tests in test class

#### 2010-10-08 08:49 hewitson

\* tests/: @ltpda\_test\_runner/get\_tests\_for\_class.m,
 @ltpda\_test\_runner/run\_test\_list.m, @ut\_result/ut\_result.m: Added
 documentation.

#### 2010-10-08 08:49 hewitson

\* tests/@ltpda\_test\_runner/: get\_builtin\_model\_tests.m,
 get\_class\_tests.m: Added documentation. Now calls the private
 method get\_tests\_in\_dir.

# 2010-10-08 08:48 hewitson

\* tests/@ltpda\_test\_runner/get\_tests\_in\_dir.m: New private method to get a test array for all test classes below the given directory.

#### 2010-10-07 16:58 hewitson

\* @ao/iplot.m: Adds the description of the object to the legend. We still need to put the override in place, so if this annoys people, please feel free to revert the version back for now.

#### 2010-10-07 16:58 hewitson

\* @ltpda\_uoh/: fromModel.m, getBuiltInModels.m: Use the new utility for getting the built-in model paths.

# 2010-10-07 16:57 hewitson

\* +utils/@prog/dirscan.m: Bug fix: forgot to propagate the root directory.

# 2010-10-07 16:57 hewitson

\* +utils/@models/: getBuiltinModelSearchPaths.m, models.m: A utility to retrieve all the paths of the built-in models.

### 2010-10-07 16:56 hewitson

\* tests/ao/@test\_ao\_abs/: test\_ao\_abs.m, test\_vector\_input.m: Tests of the ao/abs method. This class inherits the tests from the vector test class. Later it will inherit other classes. At the moment it just overloads the single vector test so as to set the test data, then call super.

### 2010-10-07 16:55 hewitson

\* tests/ao/@ltpda\_vector\_utp/: ltpda\_vector\_utp.m,
 test\_vector\_input.m: A class which specialises the ltpda\_utp base

class to add tests with vector inputs.

### 2010-10-07 16:54 hewitson

\* tests/@ut\_result\_printer/ut\_result\_printer.m: A class for printing a set of results from a test runner. So far it only offers dumping some info to the terminal, but we'll extend this later to printing documents of different types.

#### 2010-10-07 16:53 hewitson

\* tests/@ut\_result/ut\_result.m: This encapsulates the result of running a single test case.

### 2010-10-07 16:52 hewitson

\* tests/@ltpda\_test\_runner/: get\_builtin\_model\_tests.m,
 ltpda\_test\_runner.m, run\_test\_list.m, run\_tests.m,
 get\_class\_tests.m, get\_tests\_for\_class.m: A class for running the
 new ltpda unit tests.

#### 2010-10-07 16:52 hewitson

\* tests/@ltpda\_utp/: char.m, copy.m, display.m, ltpda\_utp.m: This class forms the base of a new class-based unit test structure.

# 2010-10-07 13:35 ingo

\* @LTPDAprefs/LTPDAprefs.m: Use "genpath" for adding model path so that we also add the sub directories.

### 2010-10-07 09:56 hewitson

\* +utils/@prog/: dirscan.m, prog.m: A new function which
recursively scans directories and returns a list of directories
which match the given regular expression.

### 2010-10-05 18:04 ingo

\* @ao/intersect.m: First draft of a new intersect method.

### 2010-10-05 09:29 congedo

\* @ao/: tdfit.m, xfit.m: small bugs fixed.

#### 2010-10-04 20:19 adrien

\* @ssm/: modelHelper\_declareParameters.m,
modelHelper\_introScript.m, ssm.m: Class updates : removes the
"describe" call to constructor

### 2010-10-04 20:18 adrien

\* @ssm/displayProperties.m: Updated header

### 2010-10-04 18:56 adrien

\* @ao/spsd.m: adapting code to the new ltpda spsd function

### 2010-10-04 18:56 adrien

 $\ast$  @ao/optSubtraction.m: This function is adapted to the new spsd options

### 2010-10-04 18:55 adrien

\* @ao/gapfillingoptim.m: Although slow, this gap-filling works really well. It is based on SPD and some multitaper-windowing technique to minimize biases.

# 2010-10-04 18:52 adrien

\* @ssm/simulate.m: More accurate message

2010-09-29 13:28 ingo

\* @plist/eq.m: bug fix: the check for PLISTs with a different order didn't work. new check: This method checks also the properties of a param value.

2010-09-28 19:52 ingo

\* @param/: attachToDom.m, fromDom.m: bug fix: Add the properties of a parameter to the DOM object. For this it was necessary to create for 'val' a new node.

2010-09-28 19:49 ingo

 $\ast$  @paramValue/setProperty.m: bug fix: The MATLAB function 'struct' have an different behaviour if the second input is a cell.

2010-09-28 19:48 ingo

\* +utils/@xml/getNumber.m: bug fix for the case [true; false]

2010-09-28 19:47 ingo

\* +utils/@xml/xml.m: add help for prototype

2010-09-28 19:47 ingo

\* +utils/@xml/num2str.m: some cosmetics

2010-09-25 07:51 mauro

 $\ast$  @ao/mean.m: I forgot to fix the help when changing the way we calculate the uncertainty of the mean

2010-09-24 18:17 ingo

\* @ao/elementOp.m: bug fix: Use always the datatype of the first input.

2010-09-23 21:50 ingo

\* @ao/: minus.m, mrdivide.m, plus.m, rdivide.m, times.m: adapt this methods to the new version of ao.element0p

2010-09-23 21:50 ingo

\* @ao/elementOp.m: new version

2010-09-23 21:49 ingo

\* @ao/: ao.m, fromDatafile.m: bug fix.

2010-09-23 21:49 ingo

\* @ao/: and.m, or.m: new AO methods.

2010-09-22 22:39 mauro

\* @ao/scale.m: Implemented error propagation for this operator

2010-09-21 17:01 ingo

 $\ast$  @ao/elementOp.m: bug fix: There was an index issue for the operation M\_NP + H\_NP

2010-09-20 23:14 mauro

\* @ao/detrend.m: Changed default value of detrending order to 1 (linear trend removal) to harmonize with Matlab behavior UTP updated

2010-09-20 10:22 mauro

\* @ao/ao.m: Fix in help text

2010-09-18 08:57 mauro

\* @ao/filtSubtract.m: Fixed help string

2010-09-17 16:12 ingo

\* +utils/: @helper/saveobj.m, @bin/fil.m: Remove the fourth output, VERSN, of FILEPARTS will be removed in a future release.

2010-09-17 16:08 ingo

\* @ao/curvefit.m, @ao/gnuplot.m, @history/dotview.m, @history/history.m, @ltpda\_uoh/report.m, @ltpda\_uoh/type.m, @pzmodel/fromLISO.m, @ssm/dotview.m, @LTPDAworkbench/LTPDAworkbench.m, @LTPDAworkbench/cb\_importFromMfile.m, @LTPDAworkbench/export.m, @LTPDAworkbench/fromM.m: Remove the fourth output, VERSN, of FILEPARTS will be removed in a future release.

2010-09-17 16:07 ingo

\* @ao/: ao.m, fromDatafile.m: Now it is possible to read files with a other delimiter than a tab or a space.For this it is necessary to specify the delimiter in the PLIST.

2010-09-17 07:39 mauro

\* @ao/melementOp.m: Added error propagation for multiplication and division operations

2010-09-17 07:24 mauro

\* @ao/elementOp.m: Bug fixed

2010-09-17 06:24 mauro

 $\ast$  @ao/timeaverage.m: Fixed a bug calculating the uncertainty for the case of 'mean' method.

2010-09-16 17:52 ingo

\* +utils/@helper/helper.m: Add propotype of 'getHelpPath'

2010-09-16 17:03 ingo

\* +utils/@helper/getHelpPath.m: new method to get the path of the LTPDA help pages.

2010-09-16 14:10 adrien

\* @ssm/simulate.m: header modified ("to do")

2010-09-16 14:09 adrien

\* @ssm/reorganize.m: better option plist using paramValue

2010-09-16 13:22 ingo

\* @plist/tohtml.m: bug fix: uses the 'info.xml' to get the
docstyle.css path

2010-09-16 13:14 ingo

 $\ast$  @minfo/tohtml.m, @plist/tohtml.m: bug fix: fix the broken anchor

2010-09-16 12:52 ingo

\* @minfo/tohtml.m: bug fix: fix the broken links

### 2010-09-16 11:09 hewitson

\* +utils/@models/functionForVersion.m: Works with either the function handle, or the version table itself.

#### 2010-09-16 11:09 hewitson

\* +utils/@models/getDefaultPlist.m: A rather cleaner implementation.

### 2010-09-16 11:09 hewitson

\* +utils/@models/getDescription.m: Just return the top level description. Descriptions for each version can be explicitely requested by first getting the version table of the model, then calling the version function with 'description'

### 2010-09-16 11:08 hewitson

\* +utils/@models/processModelInputs.m: A new hook to get back the version table. Useful when creating dynamic documentation.

Allow the description to be called with 'describe' or 'description'.

#### 2010-09-16 11:07 hewitson

\* @minfo/modelOverview.m: A fairly complete function intended to display information about built-in models. The minfo from built-in models can be passed to this function and then the result displayed in the help browser. This allows creating the dynamic links in the built-in model help.

#### 2010-09-16 10:18 hewitson

\* @minfo/tohtml.m: Call plist/tohtml

#### 2010-09-16 10:17 hewitson

\* @plist/tohtml.m: Make an html table of a plist. It can be used standalone:

>> pl.tohtml

or in another document with

>> txt = pl.tohtml;

# 2010-09-16 10:07 hewitson

\* @plist/setName.m: I don't really see why we are restricting the name on a plist, but anyway I've increased it to 200 characters.

# 2010-09-16 09:04 hewitson

\* +utils/@models/: getDescription.m, processModelInputs.m: Some bug fixes to properly handle the model descriptions for each version.

#### 2010-09-16 07:02 mauro

\* @ao/curvefit.m: Fixed typo in deprecation warning text

### 2010-09-15 18:17 hewitson

\* +utils/@models/getDefaultPlist.m: Bug fix. Make sure we return the default version in the case it's not specified.

### 2010-09-15 15:20 anneke

\* @ao/mean.m: changed dy to the uncertainty of the mean

2010-09-15 12:29 hewitson

\* +utils/@models/: getDefaultPlist.m, getDescription.m, getInfo.m, processModelInputs.m: Some updates and fixes. Models can now respond to a 'doc' call.

2010-09-14 12:18 marc1

\* +utils/@math/loglikehood\_ssm.m: adapted for MCMC analysis with STOC Exercice 6 data and with SSM models

2010-09-14 12:17 marc1

\* @matrix/mcmc.m: adapted for MCMC analysis with SSM models

2010-09-13 17:08 marc1

\* @ssm/setParameters.m: semicolon added (to avoid system printing) after a call to the function

2010-09-13 17:08 marc1

\* @ssm/doBode.m: warning suppressed

2010-09-13 17:07 marc1

\* @ssm/bode.m: avoid checking of stability, the user is supposed to check it beforehand (lines are commented)

2010-09-10 23:12 mauro

\* @ao/ao.m: Declare setDy and setDx as public methods

2010-09-10 13:23 hewitson

\* +utils/@models/: functionForVersion.m, getDefaultPlist.m,
 getDescription.m, getInfo.m, models.m, processModelInputs.m:
 Starting to put in place some utilities for making the new style
 of built-in models.

2010-09-10 12:14 mauro

\* @ao/timeshift.m: There is no need to clear the errors when only shifting the time origin, I think.

2010-09-10 12:09 mauro

\* @ao/rotate.m: Use the object.method syntax

2010-09-10 11:47 miquel

\* @ao/iplot.m: introduced parameter in plist 'LegendFontSize' which allows setting precisely that.

2010-09-10 11:11 miquel

\* @ao/filtSubtract.m: - introduce parameter to cut filter transient - set correct t0 according to split - adding filter to procinfo

2010-09-10 11:03 hewitson

\* @plist/ltp\_parameters.m: Syntax bug fix

2010-09-10 06:58 mauro

\* @ao/timeshift.m: Use time/double method

2010-09-09 07:06 mauro

\* @ao/rotate.m: The multiple output syntax was breaking the history. Switch to vector output.

### 2010-09-08 13:39 adrien

\* @ssm/doSimulate.m: Major bug corrected in ssm/simulate. Noise and constants were ignored in some cases!

#### 2010-09-07 14:45 adrien

\* @ssm/: displayProperties.m, modelHelper\_displayModelProperties.m, ssm.m: This display function is now a user function. Name was revised as much too long. It works a little differently now (plist behavior and Co.). SSM models help header will need some update, as the older call is broken.

### 2010-09-07 14:13 adrien

\* @ssm/findParameters.m: The behavior of this function is now changed. It returns a plist array (instead of a cellstr). An additional option allows to serch into the field numparams.

#### 2010-09-07 10:51 eric

\* @plist/ltp\_parameters.m: As many references as I know of ...

# 2010-09-07 08:45 eric

\* @plist/ltp\_parameters.m: Introducing some reference to 'S2-ASD-ICD-2011\_Iss14 DFACS External ICD'

#### 2010-09-07 08:30 eric

\* @plist/ltp\_parameters.m: Adding reference property. All are TBD for the moment.

### 2010-09-06 19:07 adrien

\* +utils/@helper/obj2tex.m: Now works for many objects (double, logical, char, units, ao, plist, ssm, pzmodel, rational, parfrac, miir, ssmblock, cell ...). Usefull for TNs. Still some problem with large ssm objects

### 2010-09-06 19:04 adrien

\* @ssm/ssm.m: setting name to both plists

#### 2010-09-06 19:03 adrien

\* @ssm/modelHelper\_declareParameters.m: numparams was forgotten there.

# 2010-09-06 18:51 ingo

\* @LTPDAprefs/LTPDAprefs.m: Adding callbacks for adding and removing the model paths from the MATLAB search path.

# 2010-09-06 13:12 hewitson

\* @ltpda\_uoh/fromModel.m: support the new and old style built-in models.

### 2010-09-06 13:12 hewitson

\* @minfo/: addChildren.m, minfo.m, setDescription.m: Two new fields for minfo which allow us to have nested minfo objects together with an associated description. This is part of the exploration for new built-in models.

### 2010-09-03 19:47 adrien

\* +utils/@helper/: helper.m, obj2tex.m: This is an attempt to convert objects to a TeX string. Needs some debug.

#### 2010-09-03 19:46 adrien

\* @plist/: ltp\_parameters.m, plist.m: Corrected a bug, and added some interface.

### 2010-09-03 13:55 ingo

\* @LTPDAworkbench/lib.mat: update library

#### 2010-09-02 18:35 adrien

\* @ssm/: assemble.m, blockMatMult.m, ssm.m, validate.m: This solves so far the vulneability of the SSM objects. — the function statesizes was rewritten as some cases were skipped out so far. The search is now exhaustive. — the error is dected at the source, ie in ssm/inputsizes and ssm/outputsizes instead of ssm/validate. — models with 0 state are not allowed to have 0 output but 1+ input or 0 input but 1+ output. This makes an error. Consequenctly — the empty ssm is accepted — all meaningful models are accepted — assemble only crashes if there is one output, no state, and all the inputs are in the loop. Meaning, in this case, that assembling the model was useless anyway — ssm.blockMatMult takes the matrix sizes so it is able to generate a m\*n matrix by multiplying a m\*0 and a 0\*n matrix.

### 2010-09-02 18:28 adrien

\* @ssm/append.m: Now also appends the numparams field

#### 2010-09-01 15:57 ingo

\* @ao/search.m: Add history to the ao/search method

### 2010-08-31 16:37 mauro

\* @ao/split.m: Bug fix: the previous fix made some light on another issue.

#### 2010-08-31 16:21 adrien

\* @ssmblock/ssmblock.m: deprecation warning for ssmblock/resplit, which is not used anymore.

### 2010-08-31 16:21 adrien

\* @ssm/ssm.m: update of the methods declaration. Update of header

# 2010-08-31 16:20 adrien

\* @ssm/simplify.m: Same here : ssm must have some inputs and outputs.

# 2010-08-31 16:19 adrien

\* @ssm/validate.m: ssm objects with no inputs/outputs are not validated. No exception is made for the ssm() object, but it never goes through this function.

## 2010-08-31 16:18 adrien

\* @ssm/: setBlockDescriptions.m, setBlockNames.m, setBlockProperties.m, setPortProperties.m, setPortDescriptions.m, setPortNames.m, setPortUnits.m: Two functions will replace these five in the long run. A deprecation warning was added. Indexing of ports/blocks is more in-line with the rest of the ssm in the new functions.

#### 2010-08-31 16:16 adrien

\* @ssm/modelHelper\_displayModelProperties.m: Now also displays the numparams plist

- 2010-08-31 16:16 adrien
  - \* @ssm/modelHelper\_declareParameters.m: Now also builds the numparams plist
- 2010-08-31 16:15 adrien
  - \* @ssm/kalman.m: Better handling of "reorganize" case : takes two ssm objects in.
- 2010-08-31 16:14 adrien
  - \* @ssm/doSimulate.m: Added comments in code
- 2010-08-31 16:13 adrien
  - \* @ssm/blockMatMult.m: Proper implementation in case of empty matrix multiplication
- 2010-08-31 15:19 congedo
  - \* @ao/xfit.m: no message
- 2010-08-31 10:23 hewitson
  - \* @LTPDAprefs/LTPDAprefs.m: Updated help to show convenience accessors.
- 2010-08-31 10:22 hewitson
  - \* @LTPDAprefs/LTPDAprefs.m: Added again the ability to set preferences by the command-line. Removed some and added some possibilities. Also added all convenience getters for the properties.
- 2010-08-31 08:21 mauro
  - \* @ao/split.m: Bug fix: we were summing seconds to millisecond. Solved by calling time/double Cosmetic changes
- 2010-08-31 07:43 mauro
  - \* @ao/fromDatafile.m: Horrible bug fixed.
- 2010-08-30 18:48 ingo
  - \* @plist/plist.m: Add some keys to the SAVE\_OBJ\_PLIST plist factory: postfix: Add this postfix to the filename prefix: Add this prefix to the filename individual files: (Default = false) Saves the objects into individual files.
- 2010-08-30 18:47 ingo
  - \* @ltpda\_uo/save.m: Add the functionality for the new PLIST keys: postfix: Adds a postfix to the filename prefix: Add a prefix to the filename individual files: If true then saves this method the objects into individual files.

Add a new rule how to get the filename: 1. Use the filename from the PLIST 2. Use the input string as the filename 3. Use the object name and the current folder for the filename Must be defined for each object. 4. If there are more than one input objects and the 'individual files' Switch is false then use the variable name.

- 2010-08-30 09:26 hewitson
  - \* @plist/plist.m: A bug sneaked in here during the conversion to the new preferences. We can't have a plist with options where the options are empty but the default index is 1. So if there are no repositories specified at the user level, we create a single

'localhost' repository as the default.

This default repository used to have a hostname '' — is that better?

2010-08-30 00:20 nicolodi

\* @time/: minus.m, plus.m: Semplify.

2010-08-29 22:52 nicolodi

\* @time/: display.m, minus.m: display.m

2010-08-27 15:09 adrien

\* @ssm/: PSD.m, addParameters.m, doSimulate.m, keepParameters.m, parameterDiff.m, reshuffleSym.m, setBlockDescriptions.m, setBlockNames.m, setParameters.m, setParams.m, setPortDescriptions.m, setPortNames.m, simplify.m, simulate.m, ssm.m, ssm2dot.m, ssmFromMiir.m, ssmFromPzmodel.m, ssmFromss.m, steadyState.m, subsParameters.m, CPSD.m, doBode.m, doSimplify.m, double.m, duplicateInput.m, findParameters.m, getParameters.m, modifyTimeStep.m, noiseSpectrum.m, reorganize.m, resp.m, sMinReal.m, setPortUnits.m, ssm2miir.m, ssm2pzmodel.m, ssm2rational.m, ssm2ss.m, ssmFromDescription.m, ssmFromParfrac.m, ssmFromRational.m: These functions all accept now the input of type foo('key1', val1, 'key2', val2). As a consequence some particuliar input behaviour were broken and were removed. Scripts may need be updated.

2010-08-27 15:07 adrien

\* @ssm/respcst.m: This function is now based on the template of resp

2010-08-27 15:07 adrien

\* @ssm/getMatrixSelection.m: This function will be removed, sends an error message now.

2010-08-27 15:04 adrien

\* @ssm/bodecst.m: Bodecst is now based on bode (except numerical calculation)

2010-08-27 15:03 adrien

\* @ssm/bode.m: Speeding up of how the outpus are set

2010-08-27 15:03 adrien

\* @ssm/blockMatIndexSym.m: This function is not useful

2010-08-27 15:02 adrien

\* @ssm/: blockMatAdd.m, blockMatFillDiag.m, blockMatFusion.m, blockMatIndex.m, blockMatIndexSym.m, blockMatMult.m, blockMatPrune.m, blockMatRecut.m: Updated block-matrix arithmetic

2010-08-27 15:02 adrien

\* @ssm/kalman.m: Now uses ssm/doSimulate so the mex file is also used for this function

2010-08-27 15:01 adrien

\* @ssm/validate.m: adapting call to name setter

2010-08-27 14:59 adrien

\* @ssmblock/ssmblock.m: Modified class to adapt the ssmport changes. Factory constructors, name setting methods, search

methods were modified. Some useless unmaintained constructors were removed, as the factors constructors do all the necessary job anyway.

#### 2010-08-27 14:55 adrien

\* @ssmblock/: containsPort.m, findPorts.m, getPortsAtIndices.m, getPortsWithName.m, makePortIndex.m: These functions now return an error. They are double of existing functions, unused and methods of a non-user object. User call are implemented at the ssm level.

#### 2010-08-27 14:54 adrien

\* @ssmport/ssmport.m: New funtion modifyBlockName(port, oldName, newName) and modified setName to set the ssmport names

#### 2010-08-27 14:53 adrien

\* @ssmport/char.m: New ssmport display for new naming system

#### 2010-08-27 14:53 adrien

\* @ssmblock/char.m: New ssmblock display, more compact

# 2010-08-26 17:08 ingo

\* @LTPDAprefs/: cb\_categorySelect.m, getPrefsPlist.m: [no log message]

### 2010-08-26 17:04 ingo

\* @paramValue/paramValue.m: Don't make a case sensitive search for the default window.

# 2010-08-26 16:07 ingo

\* @cdata/cdata.m: A cdata object should also accepts logicals. This is necessary for the logical methods: or, and, xor

### 2010-08-26 16:06 ingo

\* @LTPDAworkbench/LTPDAworkbench.m: Remove the callback for the verbose level.

# 2010-08-26 16:05 ingo

\* @LTPDAworkbench/lib.mat: update library

# 2010-08-26 16:04 ingo

\* @LTPDAprefs/LTPDAprefs.m: Use the javaObjectEDT method for creating a java object.

## 2010-08-26 16:03 ingo

\* @ao/ao.m, @collection/collection.m, @filterbank/filterbank.m,
 @matrix/matrix.m, @mfir/mfir.m, @miir/miir.m, @parfrac/parfrac.m,
 @pest/pest.m, @plist/plist.m, @pzmodel/pzmodel.m,
 @rational/rational.m, @smodel/smodel.m, @ssm/ssm.m,
 @timespan/timespan.m: set different UUIDs to the objects inside
 the initObjectsWithSize method.

## 2010-08-26 16:00 ingo

\* +utils/+const/@msg/msg.m: update the header to the current verbose level

#### 2010-08-25 18:31 nicolodi

\* @LTPDAprefs/LTPDAprefs.m: Use utility function to convert version string to float.

2010-08-25 17:05 nicolodi

\* @ao/spsd.m: Whitespace.

2010-08-25 16:49 nicolodi

\* @time/getdateform.m: Fix comment.

2010-08-25 13:26 ingo

\* @ltpda\_uo/save.m: IF the user doesn't specify the filename then save the object(s) as a MAT file and the variable name in the current folder.

2010-08-24 19:41 eric

\* @plist/ltp\_parameters.m: In this version, 'unit' has been replaced by ''.

2010-08-24 19:35 eric

\* @plist/ltp\_parameters.m: This the first version. Units and subsystems have to be checked. min/max have to be given